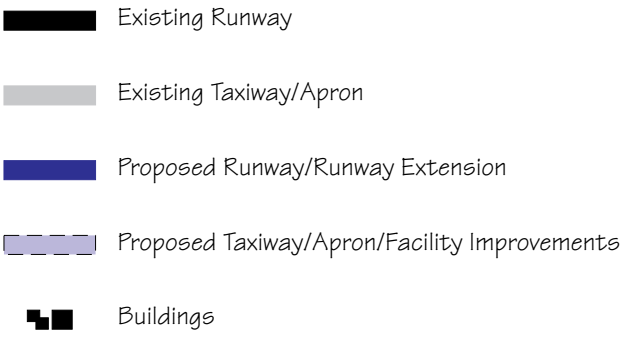
Appendix D

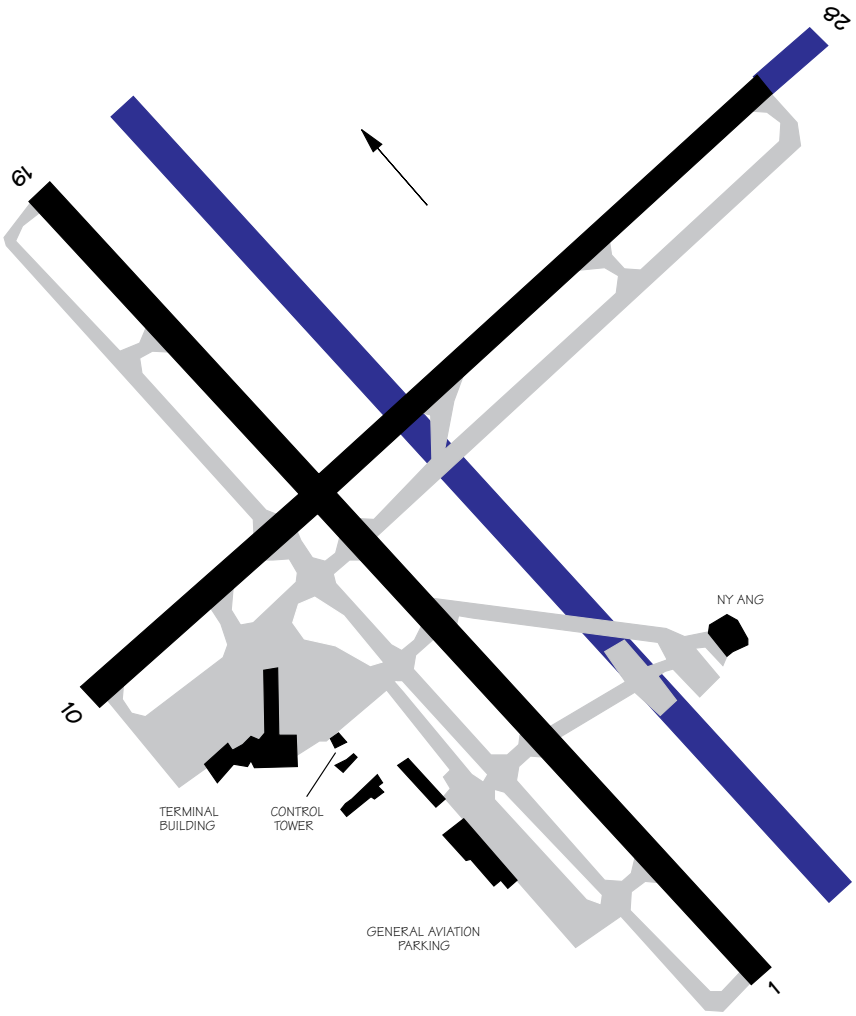
New Runway Construction Projects at Major U.S. Airports

Legend



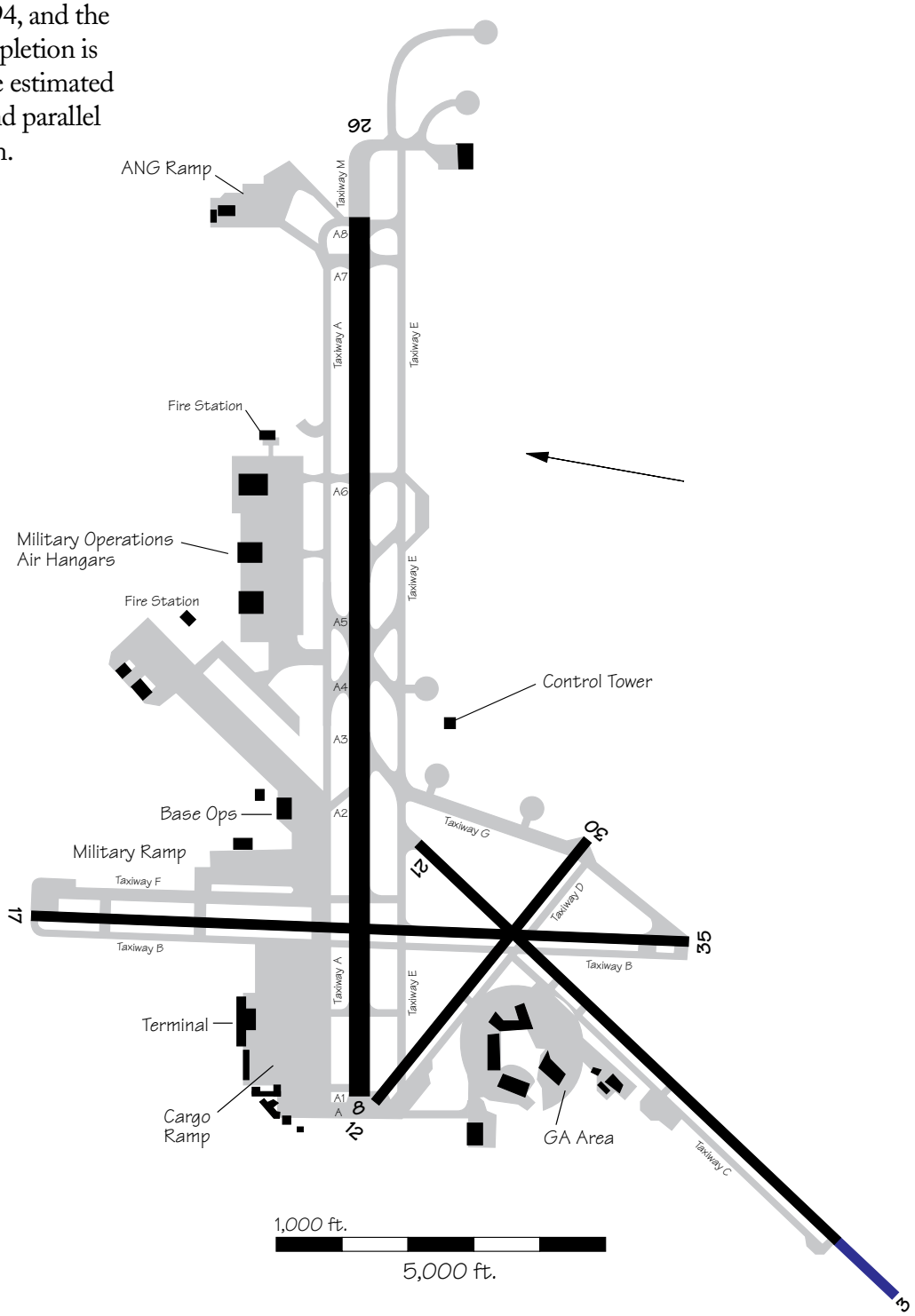
Albany (ALB)

Construction of an extension to Runway 10/28 is expected to start in 1996 and should be completed sometime in 1997. The estimated cost of construction is $2 million. A new parallel Runway 1R/19L is also planned. With construction scheduled to begin in 2006, the new runway should be operational in 2007. The estimated cost is $15 million.



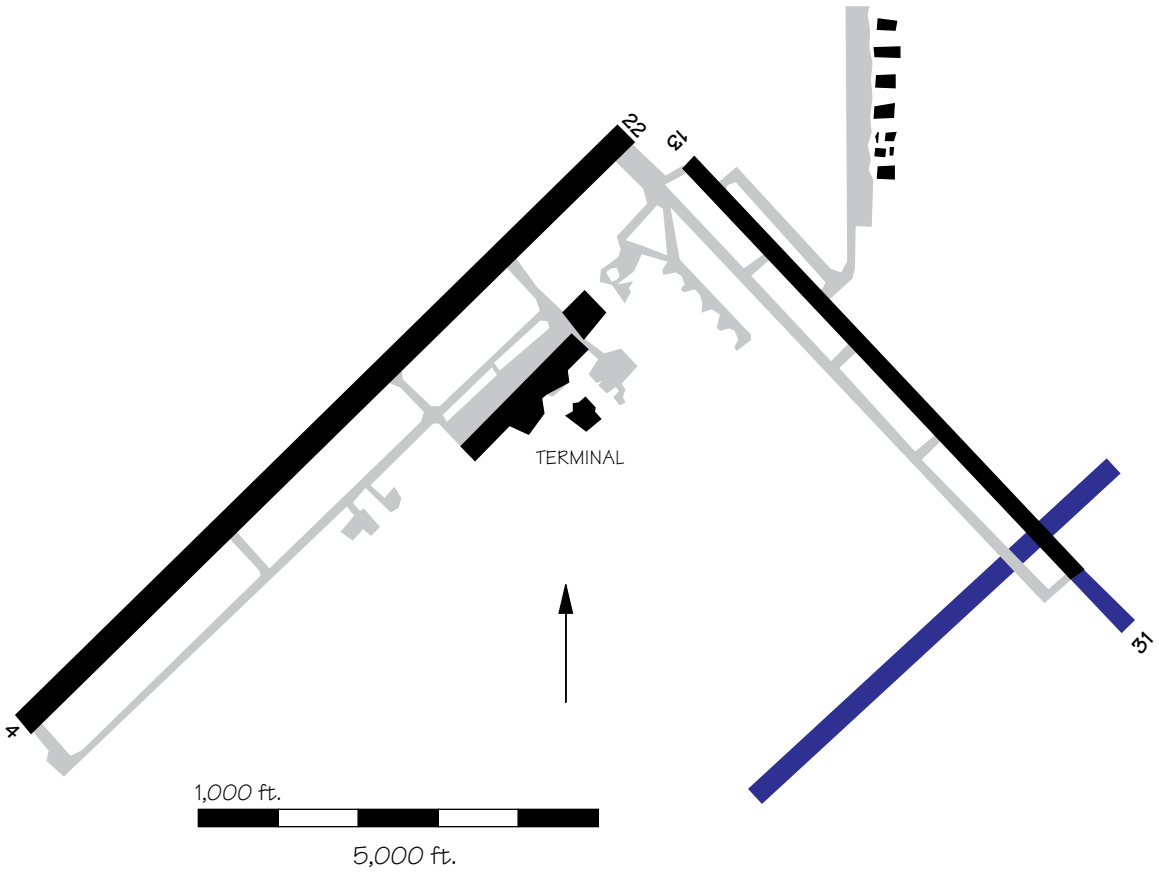
Albuquerque (ABQ)

A 1,500 foot extension to Runway 3/21 will provide an 8,800 foot runway, eliminating the intersection with Runway 8/26. Construction is scheduled to start in March 1994, and the expected date of completion is December 1994. The estimated cost of the runway and parallel taxiway is $11 million.



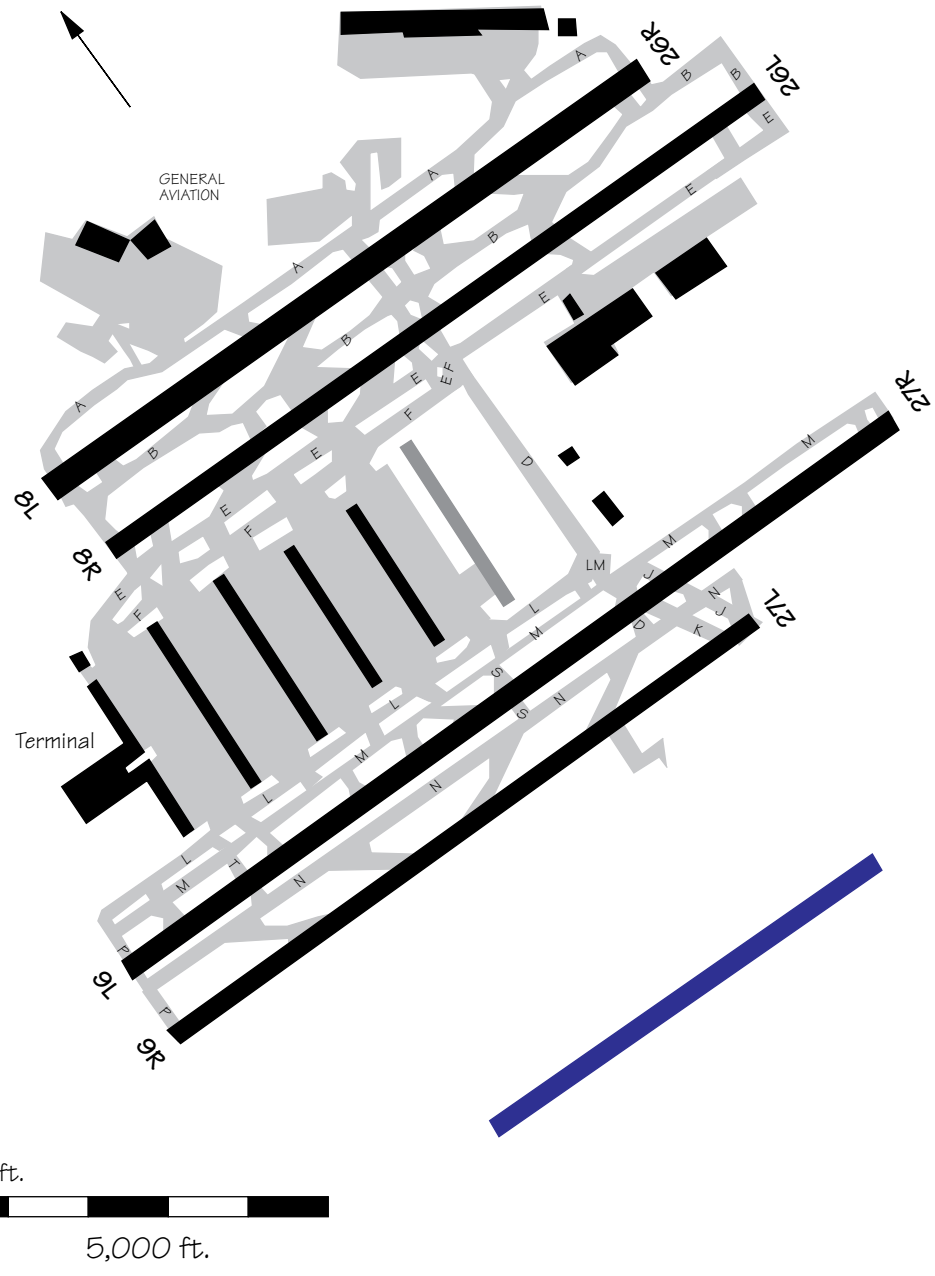
Amarillo (AMA)

An extension to Runway 13/31 should be completed by late 1997.



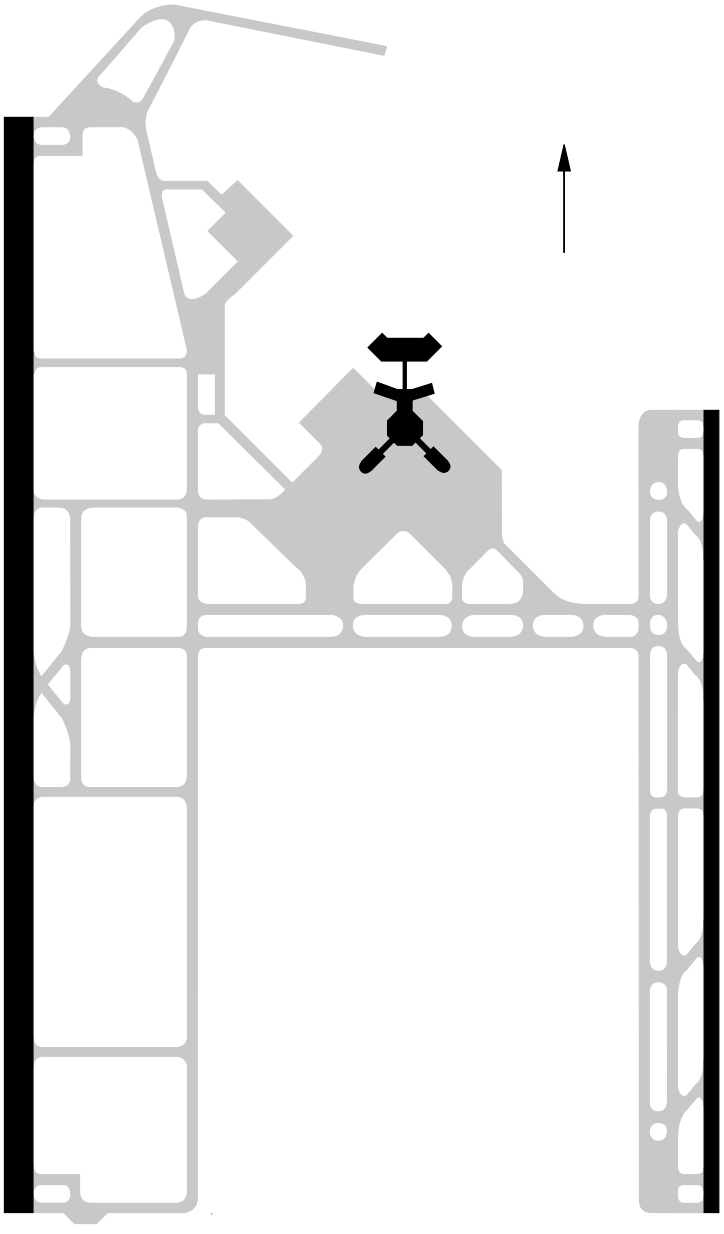
Atlanta (ATL)

A fifth parallel runway, 5,500 feet long and 3,500 feet south of Runway 9R/27L, is being planned. The total estimated cost is $130 million. Construction is scheduled to start in 1994, and the estimated operational date is 1996.



Austin (AUS)

The community has approved the sale of revenue bonds for the development of a new airport. The present Robert Mueller Airport cannot be expanded. Bergstrom Air Force Base (AFB) will be transferred to the city in 1993, and the city is now planning to construct a new parallel runway and relocate all commercial activity there in 1997-1998. The city has an Airport Master Plan under development. Environmental studies are in progress by the Air Force and the city. Since Robert Mueller Airport will close upon completion of the new airport, no capacity enhancements are planned at Mueller.



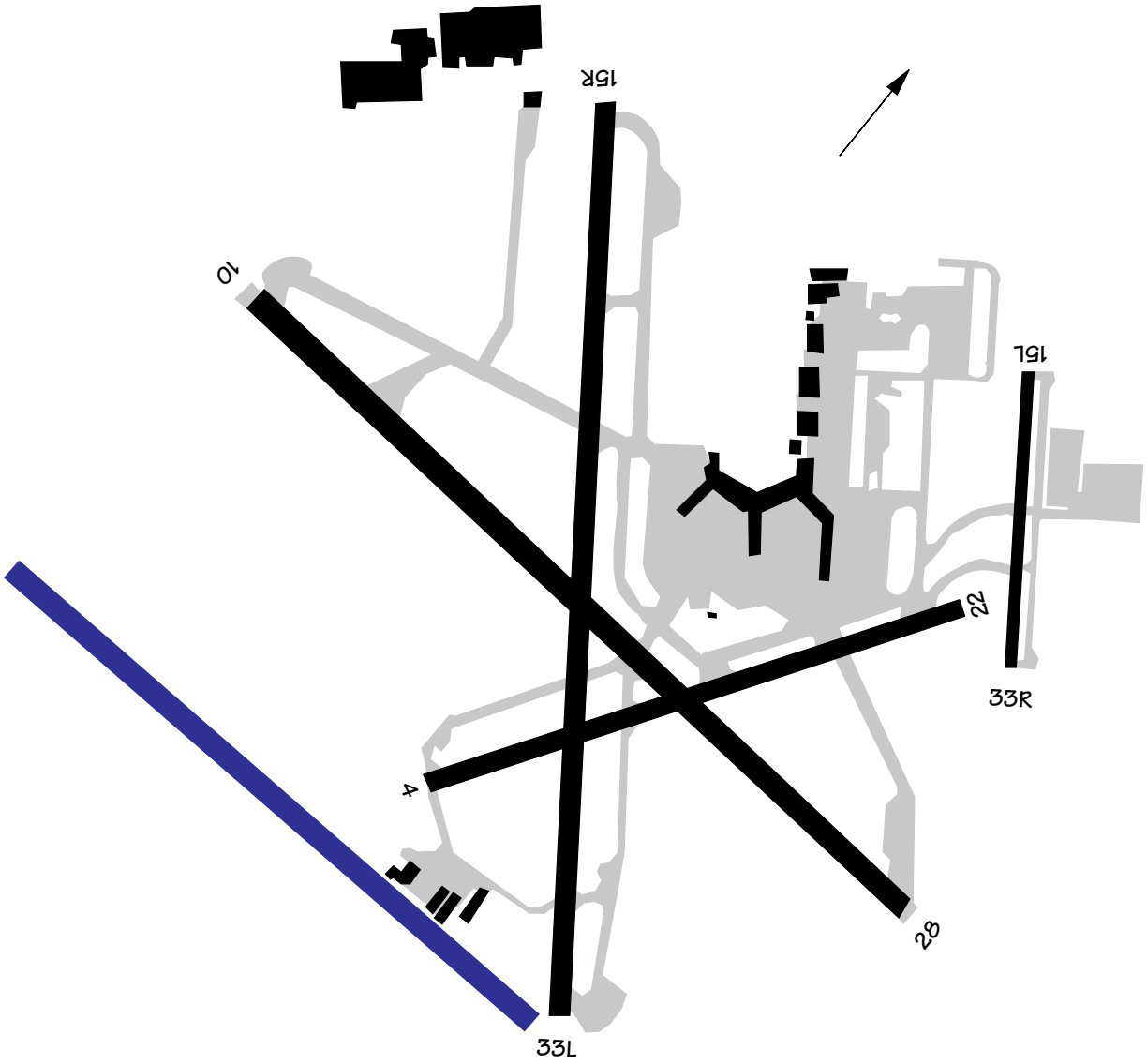
1,000 ft.

5,000 ft.

Bergstrom Air Force Base Conversion

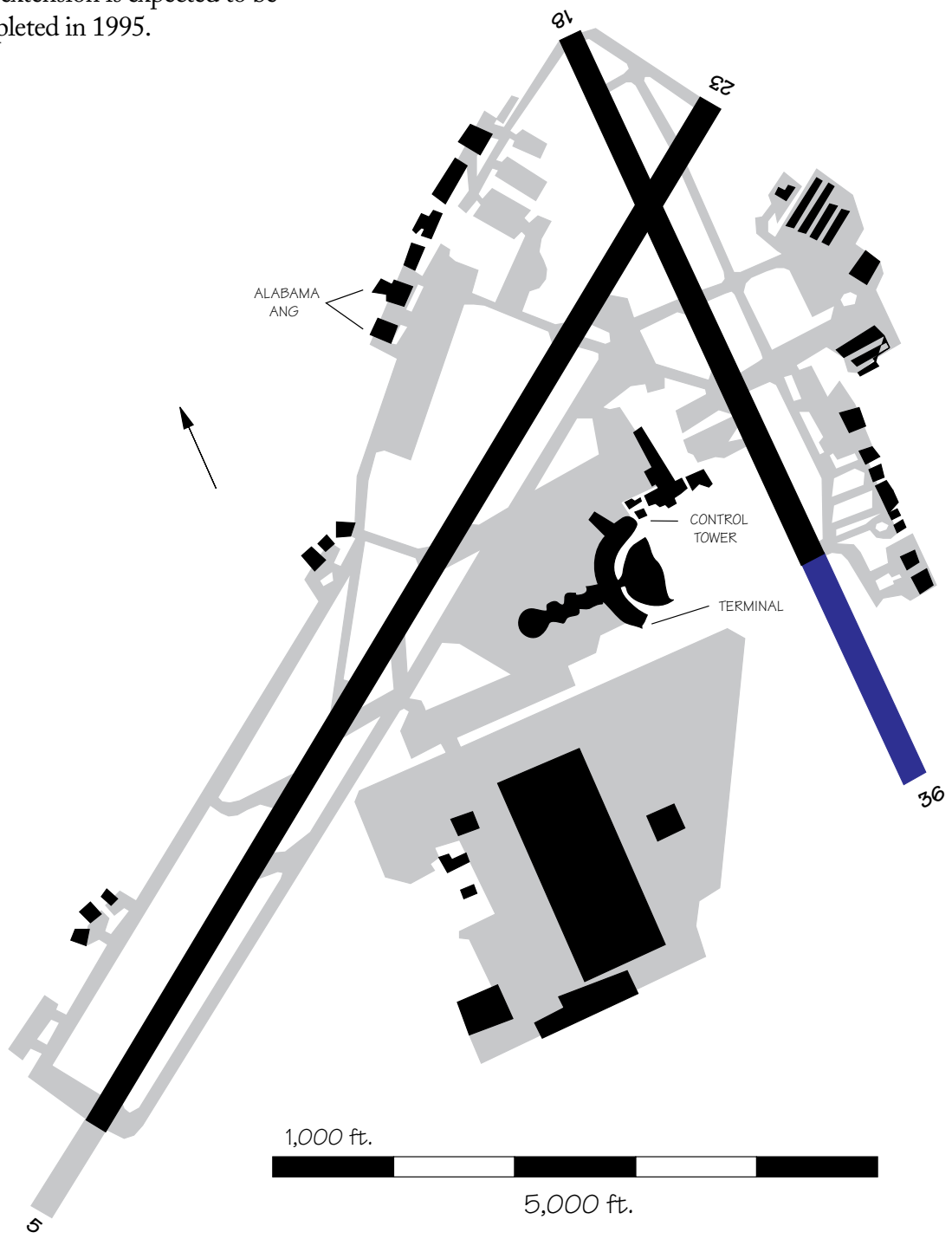
Baltimore-Washington (BWI)

A new 7,800-foot runway, Runway 10R/28L, will be constructed 3,500 feet south of Runway 10/28. Construction is expected to begin in 1995 and should be completed in 1996 at a cost of $48 million. When Runway 10R/28L is constructed, Runway 4/22 will be converted to a taxiway.



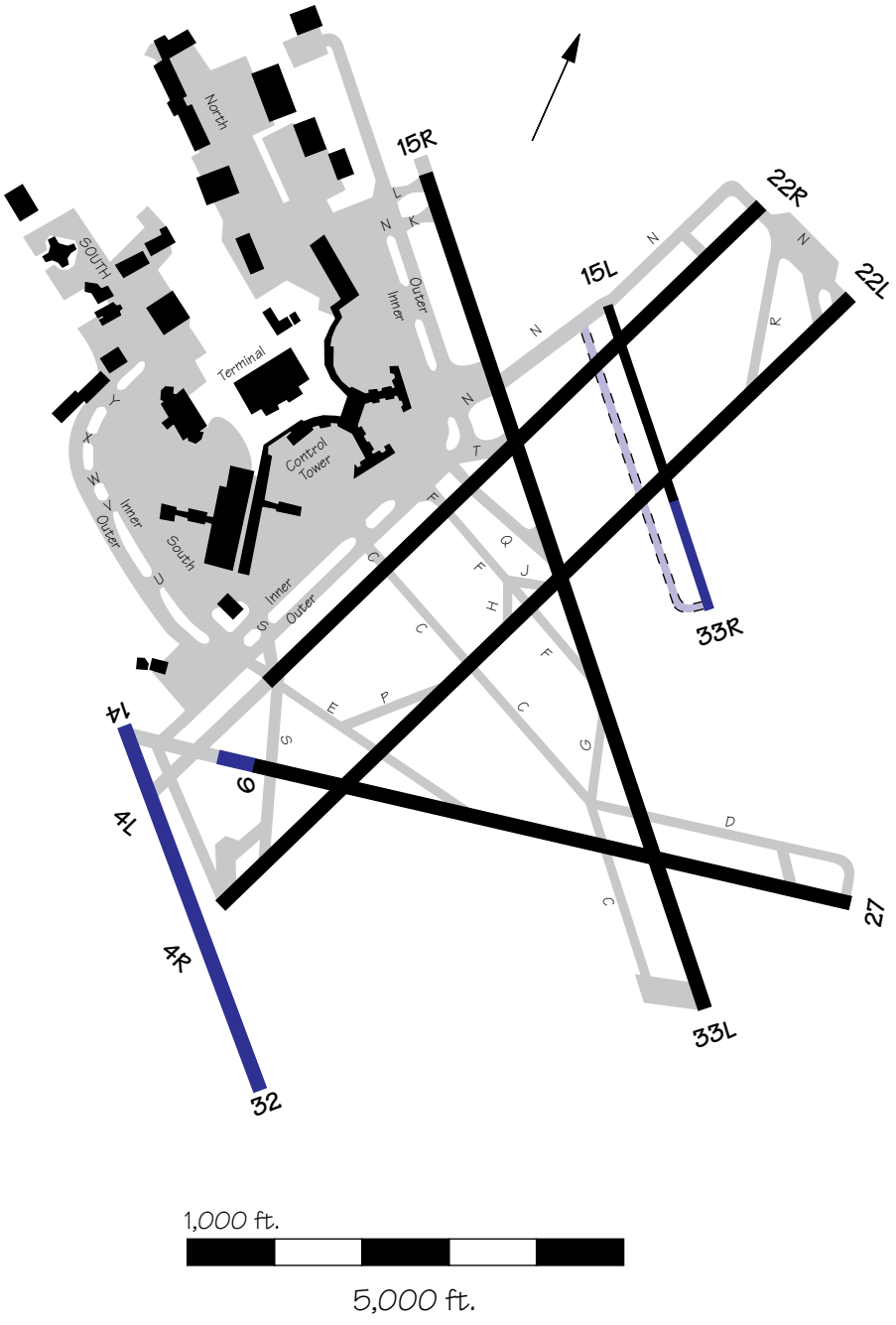
Birmingham (BHM)

Runway 18/36 will be extended from 4,800 feet to 7,500 feet. The estimated cost of construction is $42.5 million. The extension is expected to be completed in 1995.



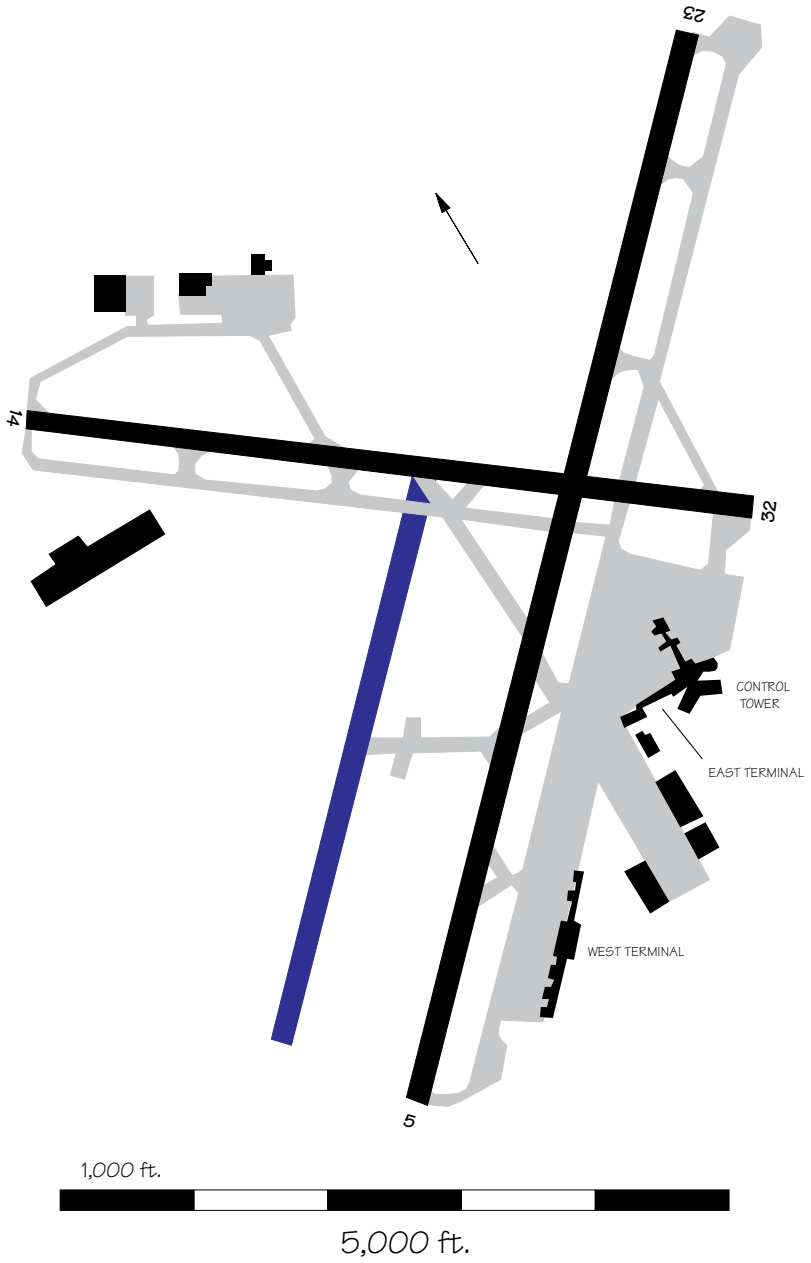
Boston (BOS)

A new uni-directional commuter runway (Runway 14/32) 4,300 feet from Runway 15R/33L, an extension of Runway 15L/33R to 3,500 feet, and a 400-foot extension of Runway 9 are being considered.



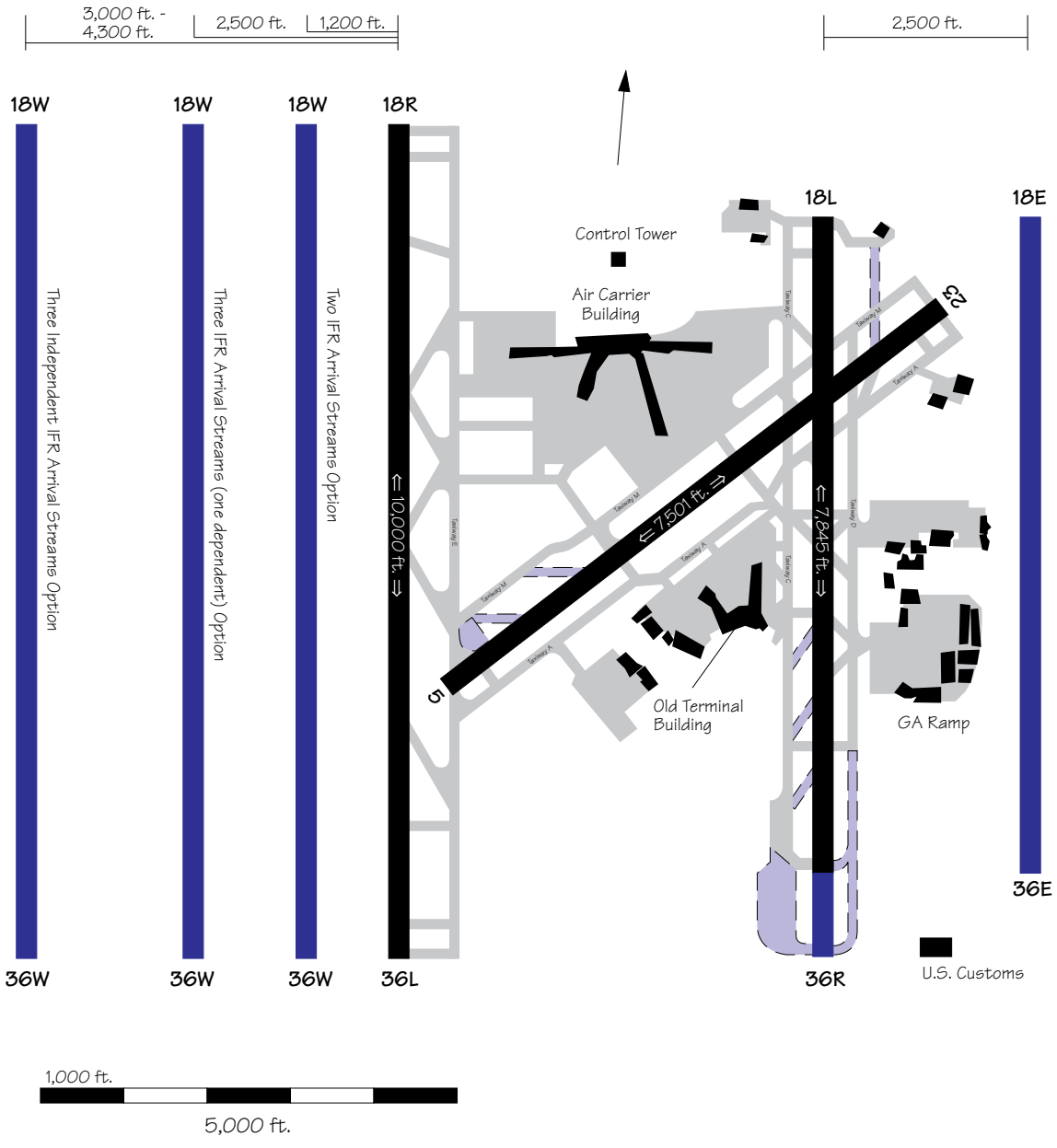
Buffalo (BUF)

There are plans to extend Runway 14/32. Construction is expected to start in 1997, with completion estimated for 1999. Construction costs are estimated at $4 million. A draft Master Plan shows a new parallel runway, Runway 5L/23R, 3,800 feet by 75 feet, located 700 feet northwest of Runway 5/23. It is planned for 1999-2000. No increase in IFR arrival capacity will be provided, but departure capacity will increase.



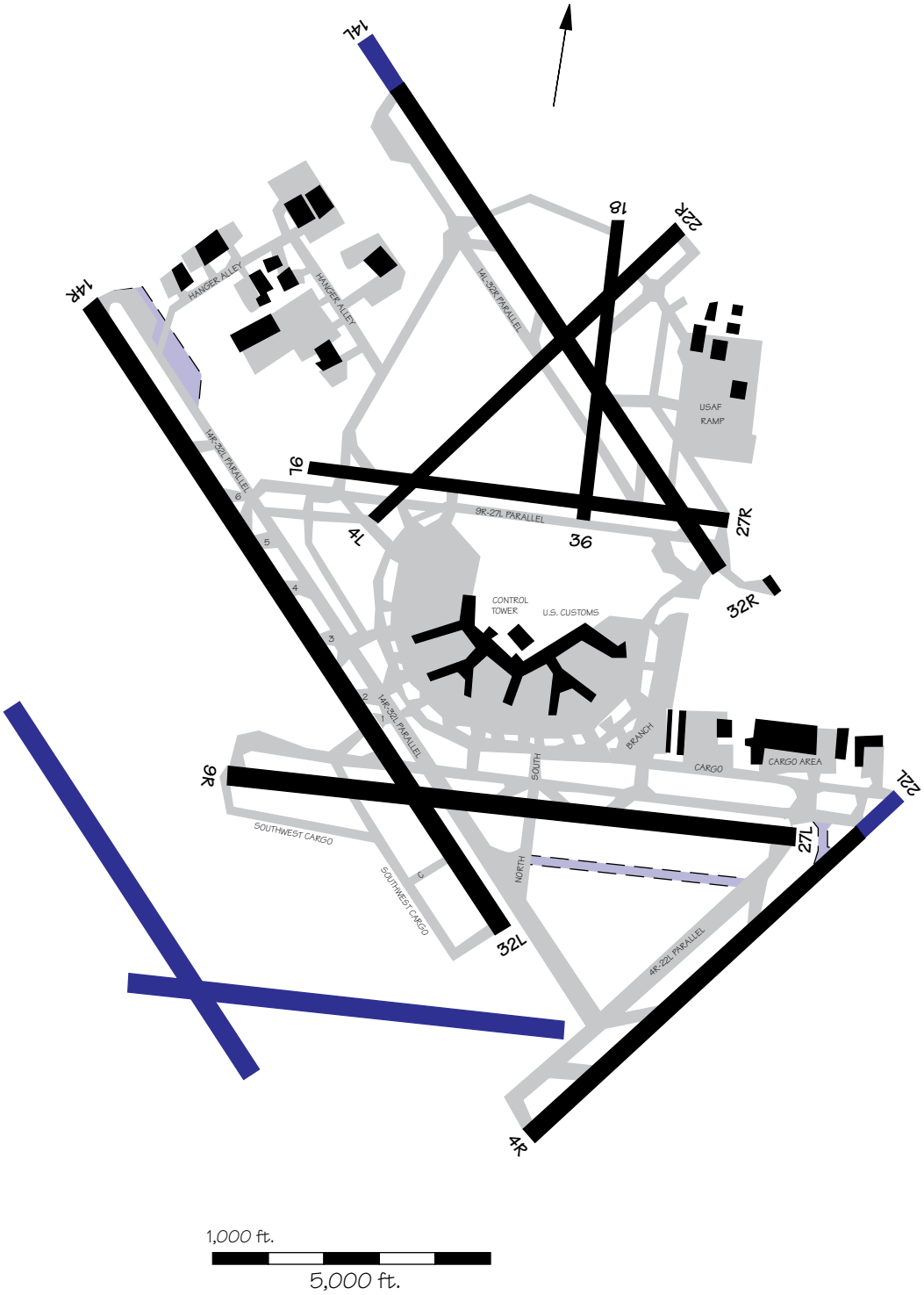
Charlotte (CLT)

Construction is expected to be completed in 1994 extending Runway 18L/36R 1,000 feet south to provide simultaneous approach capability during noise abatement hours. Plans are to open a third parallel 8,000-foot runway west of Runway 18R/36L in 1997 that would permit independent IFR arrivals. Construction should start in 1995. The Capacity Team also recommended a fourth parallel runway east of 18L/36R. Triple or quadruple IFR approaches could become available with the construction of this runway.



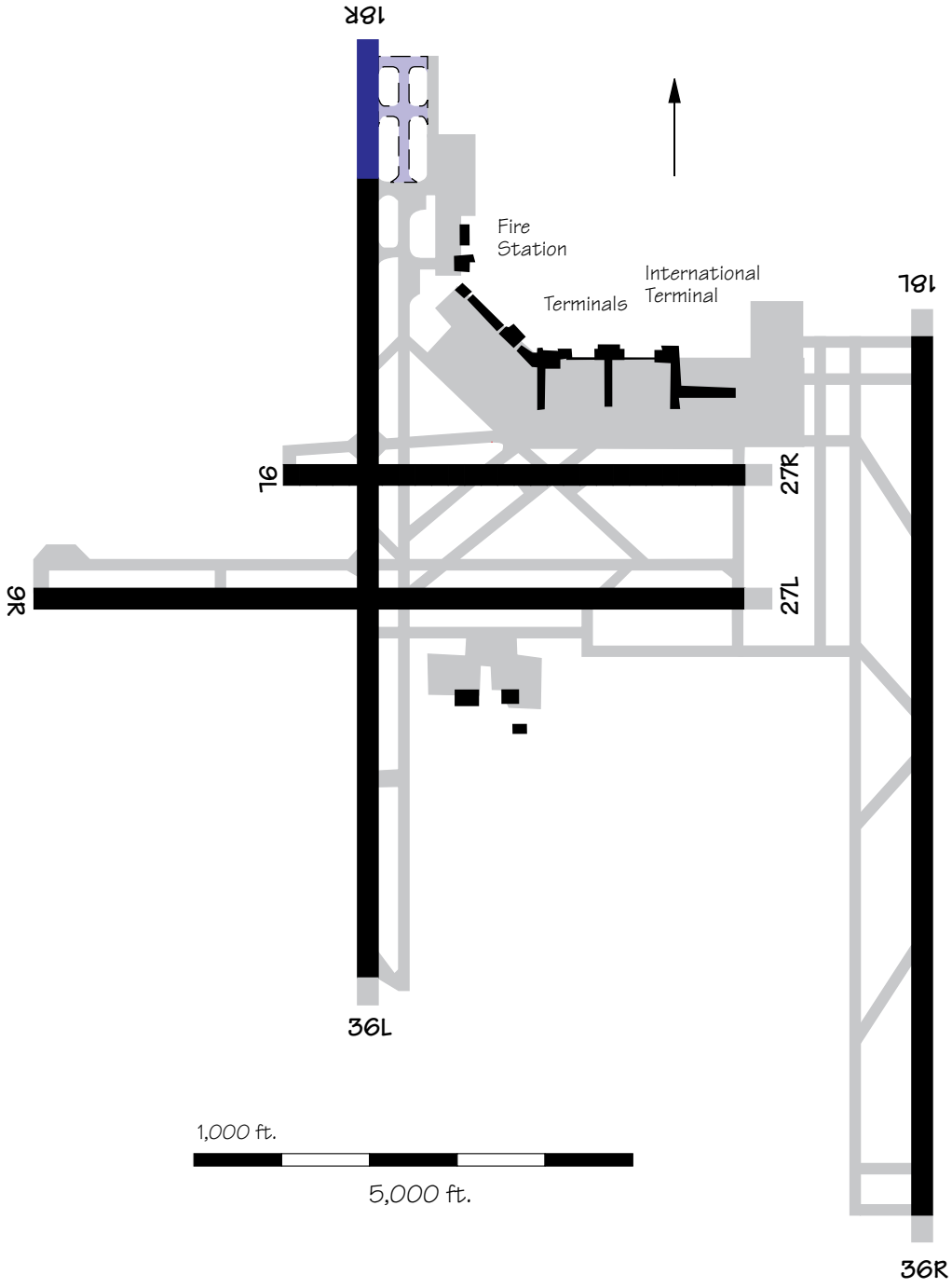
Chicago O'Hare (ORD)

New Runways 9/27 and 14/32 and extensions to Runways 14L and 22L have been recommended by the Chicago Airport Capacity Design Team.



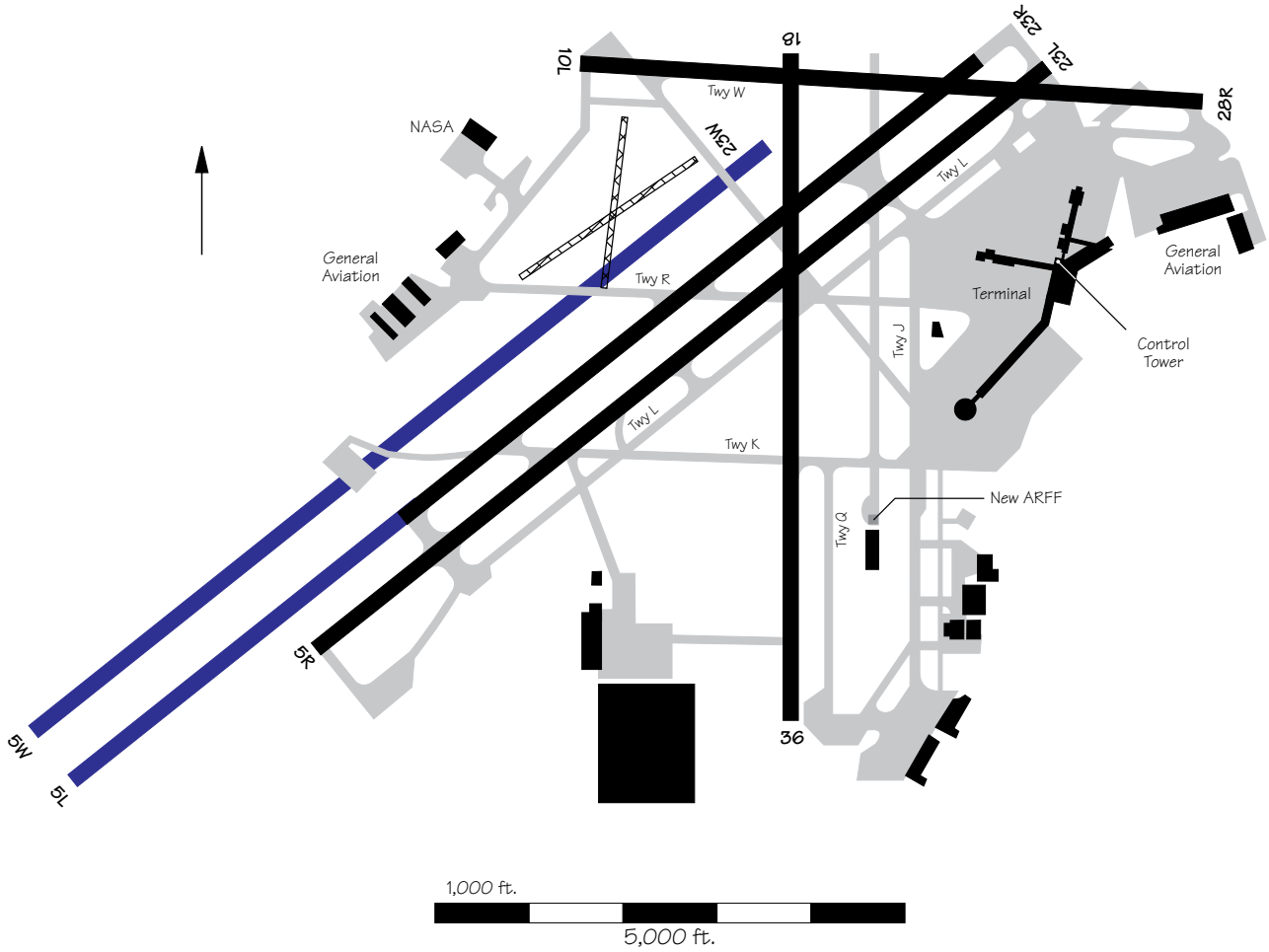
Cincinnati (CVG)

New Runway 18L/36R, parallel to and 6,200 feet from Runway 18R/36L, became operational in January 1991. This runway provides the potential for independent IFR configurations, doubling IFR arrival capacity. An extension of Runway 18R/36L has been proposed to allow all aircraft to land on Runway 18R and hold short of Runway 27L.



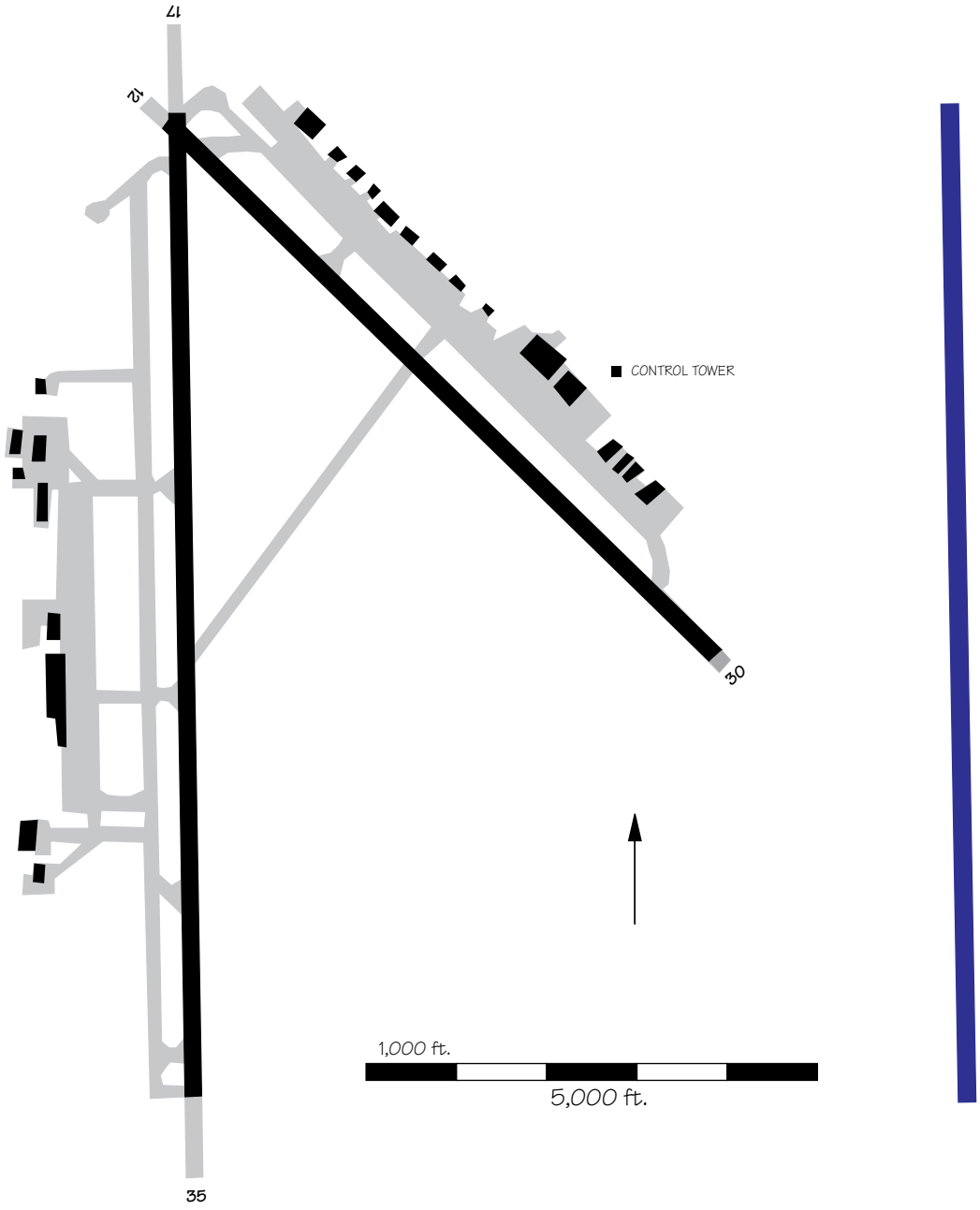
Cleveland-Hopkins (CLE)

A Master Plan Update is currently being coordinated. The preliminary Airport Layout Plan shows construction of a replacement Runway 5L/23R that would be 9,000 feet long and 150 feet wide. Construction is expected to be completed in 1998 at a cost of $42 million. Also included in the development plan is an extension of the existing Runway 5L/23R from 7,095 feet to 12,000 feet at an estimated cost of $10 million and conversion of the existing Runway 5R/23L to a parallel taxiway at a cost of $2 million. All of this work is scheduled for completion in 1998.



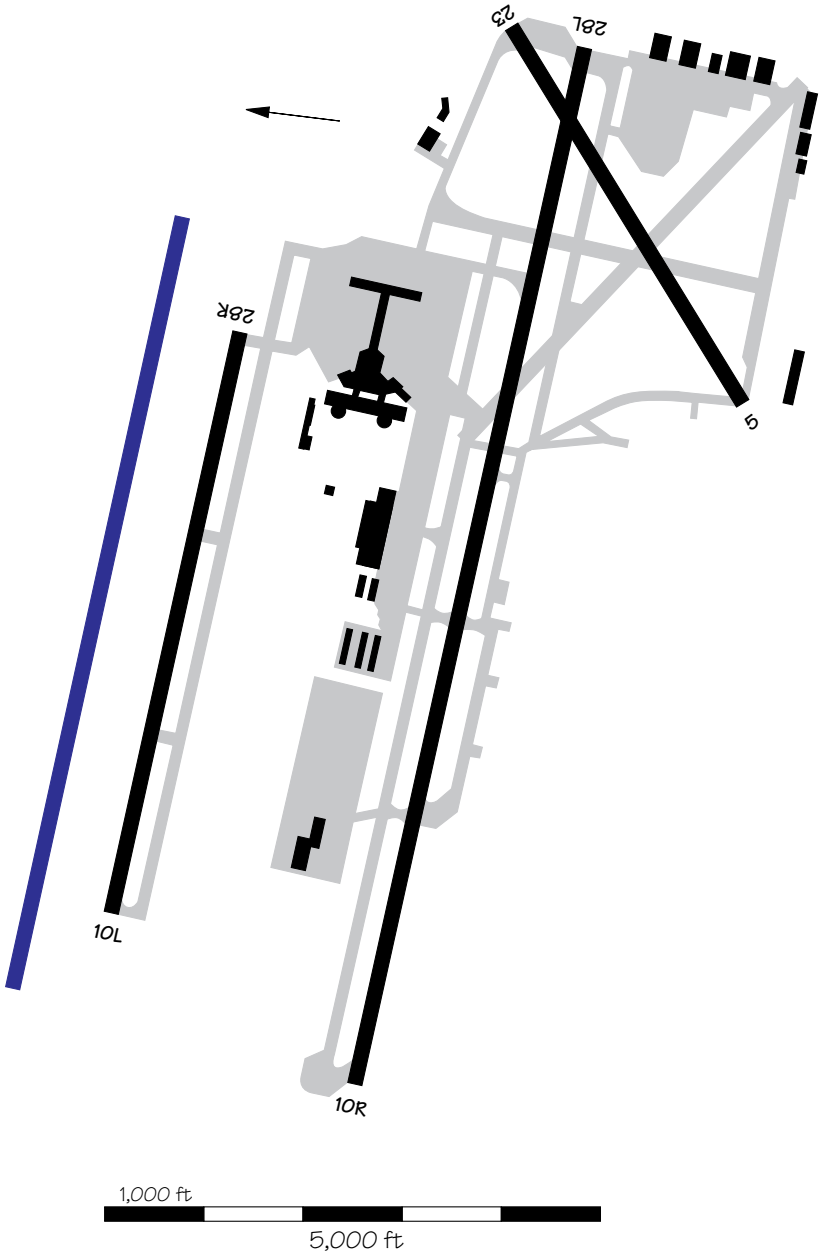
Colorado Springs (COS)

Runway 17L/35R will be constructed 8,600 feet east of existing Runway 17/35. This should permit two approach streams during IFR conditions, doubling arrival capacity. Construction began in January 1991, and the project will cost $38 million.



Columbus (CMH)

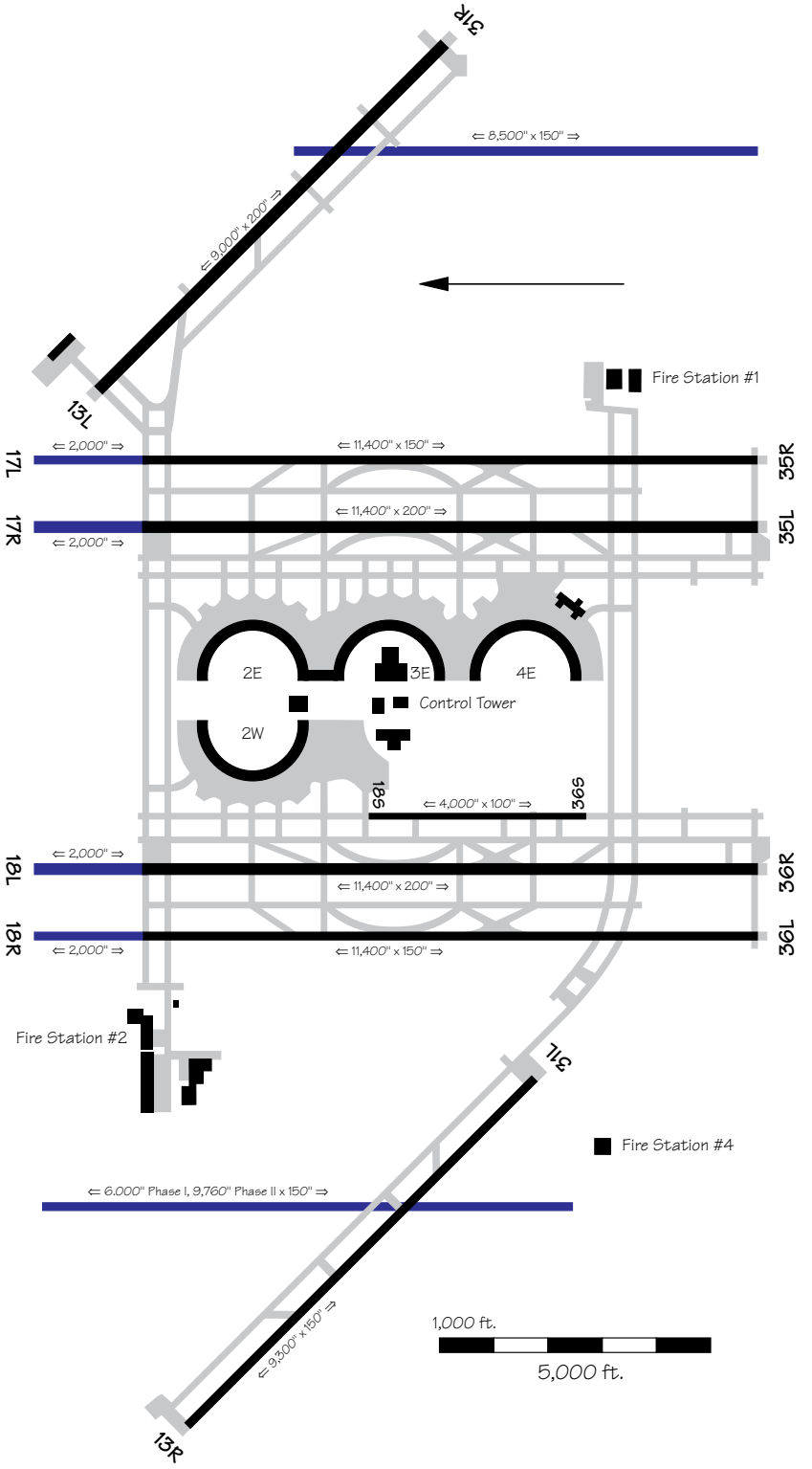
An update to the current Airport Layout Plan is being coordinated. It includes replacement of the existing Runway 10L/28R with a new 8,000-foot long and 150-foot wide runway located 600 feet north of the existing runway, which would provide a 3,400-foot separation from Runway 10R/28L. The existing Runway 10L/28R will be lengthened and converted to a taxiway. The improvements are expected to begin 1994–1995. The estimated cost is $48 million.



Dallas-Fort Worth (DFW)

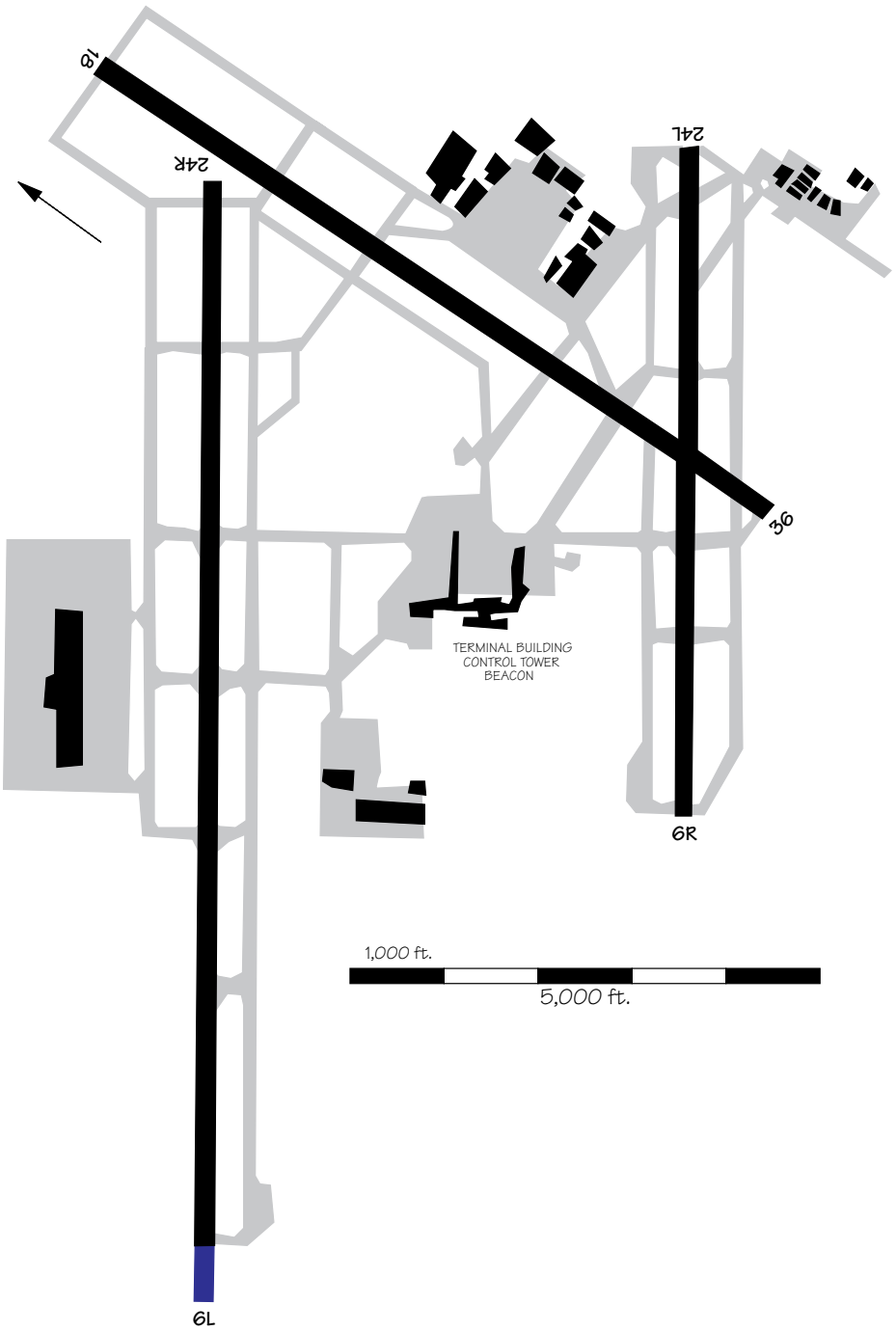
Proposed 2,000-foot extensions to all of the north/south parallel runways will provide an overall length of 13,400 feet for each. The estimated cost of each extension is $24 million. The tentative date of completion of Runway 35L is 1993, with Runway 36R scheduled to start construction in late 1993. Also planned are two more parallel runways, Runway 16L/34R and Runway 16R/34L. The east runway, Runway 16L/34R, will be extended to 8,500 feet. It will be located 5,000 feet east of and parallel to Runway 17L/35R. The estimated cost is $110 million. It is anticipated that the east runway will be operational by 1996. Construction on the west runway, Runway 16R/34L, will begin when warranted by aviation demand. It could be available as early as 1999. The estimated cost is $70 million. It will be located 5,800 feet west of Runway 18R/36L. Runway 16R/34L may be constructed in phases, with the first phase a 6,000 foot runway located north of Runway 13R/31L. The second phase extension to 9,760 feet would intersect and continue south of Runway 13R/31L. These runways could potentially permit triple or quadruple IFR arrival operations (84 and 114 hourly IFR arrivals, respectively) if the multiple approach concepts are approved.

Carswell Air Force Base (AFB), which is located in west Fort Worth, is due to close in September 1993. No decision has been made on the future use of this facility.



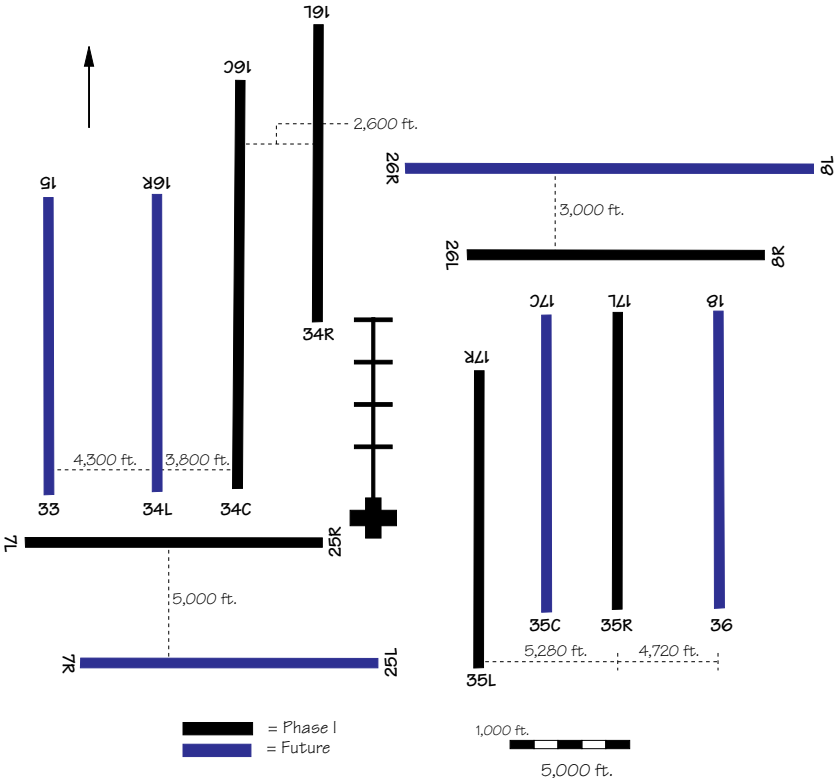
Dayton (DAY)

An extension of Runway 6L/24R to 10,900 feet has been completed. The current Airport Layout Plan shows a 600-foot extension to the southwest of Runway 6L/24R. A Master Plan Update is currently underway.



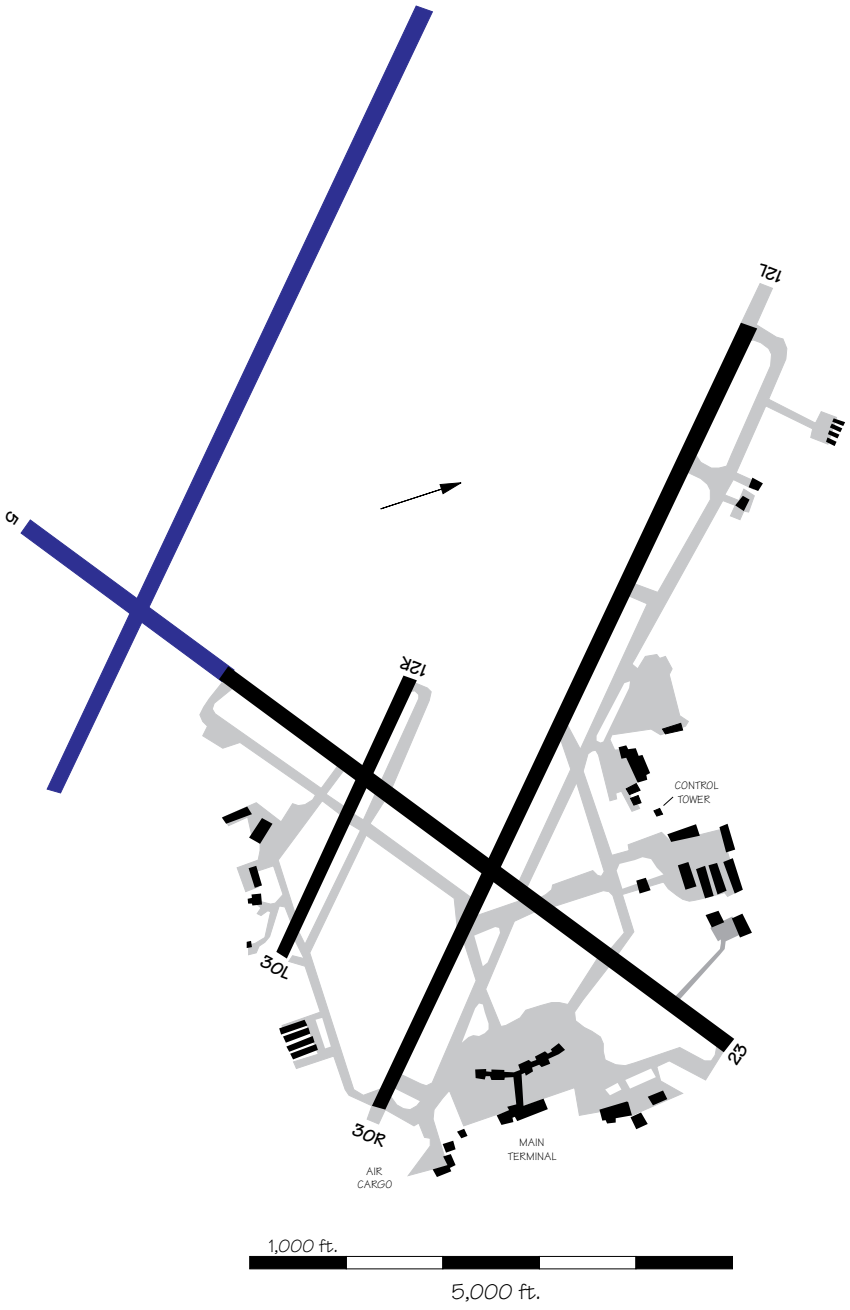
Denver International (DIA)

The initial phase of the new Denver airport will consist of five runways, with a sixth runway added a year after airport opening. The current plan involves four north-south parallels and two east-west parallels. Runway 16C/34C will initially be the farthest west of the four north-south parallels. It will be located 2,600 feet west of Runway 16L/34R and 10,200 feet west of Runway 17R/35L. Runway 17R/35L and Runway 17L/35R will be separated by 5,280 feet. East-west parallels, Runways 7L/25R and 8R/26L, will have centerlines 13,500 feet apart. Runway 7L/25R is south of Runways 16C/34C and 16L/34R. Runway 8R/26L is north of Runways 17R/35L and 17L/35R. Construction at the new airport began in late 1989. The total estimated cost of construction (exclusive of land acquisition and pre-1990 planning and administration costs) is 2.70 billion. The new airport is expected to be operational in late 1993 and could potentially operate independent triple or quadruple IFR approaches, if they are approved. This could increase Denver's IFR arrival capacity from 57 to 86 per hour with triples or 114 per hour with quadruples. A second, future phase proposes the construction of up to six more runways.



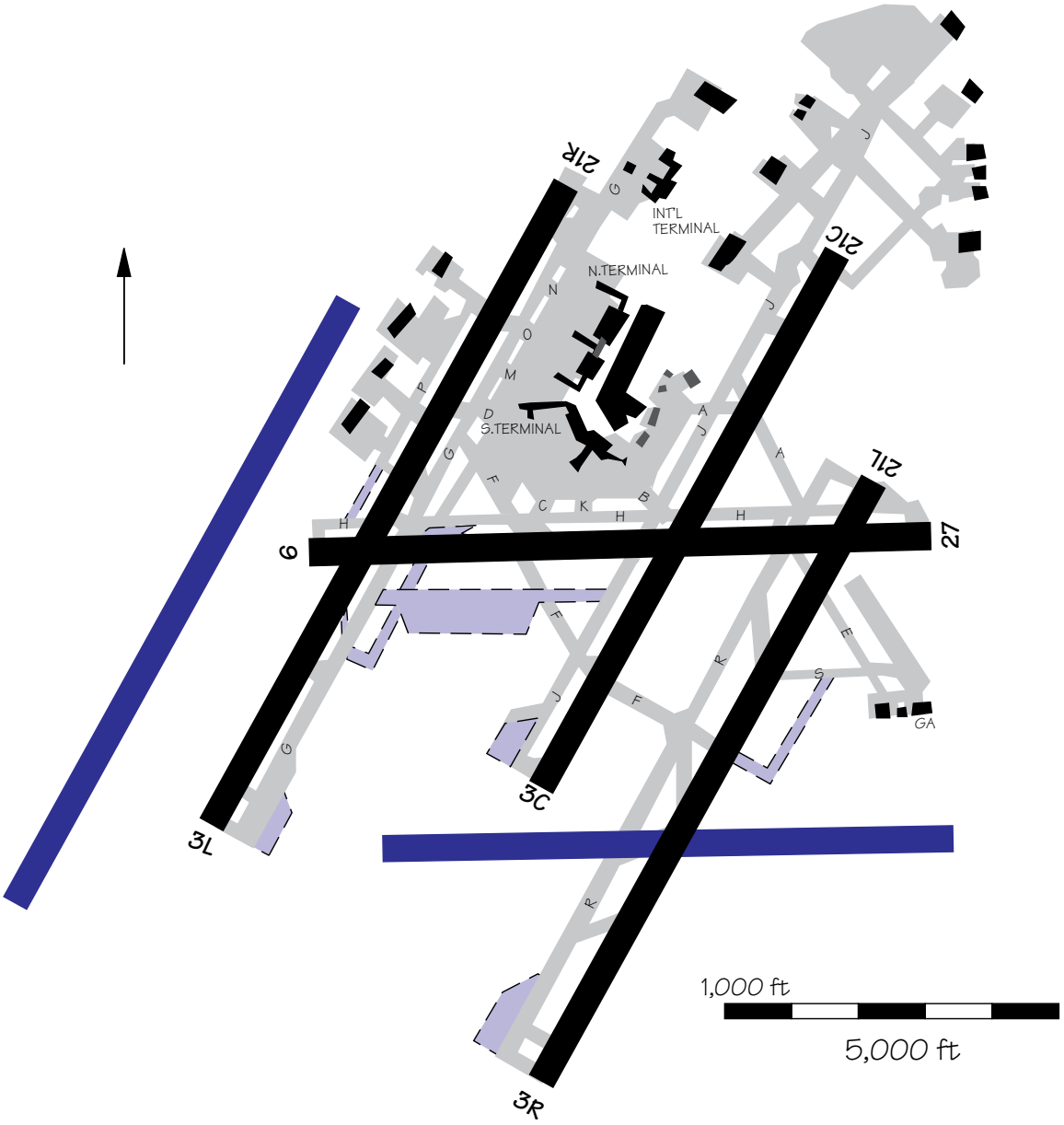
Des Moines (DSM)

An extension of the cross-wind Runway 5/23, from 6,500 to 9,000 feet, is planned to provide higher capacity to the airport and to reduce noise impacts. The estimated cost of extending the runway and upgrading the existing runway pavement to air carrier stength is $61 million. An ILS system would be installed on the Runway 23 end. Construction is expected to start in 1995. The anticipated operational date is 1998. In addition, a new 9,000 foot parallel runway at a 4,300 foot spacing to the existing air carrier Runway 13L/31R is planned for 2012. This runway would provide dual simultaneous ILS approach capability to the airport, providing a high arrival capacity in IFR conditions. Estimated cost of this parallel runway is $150 million.



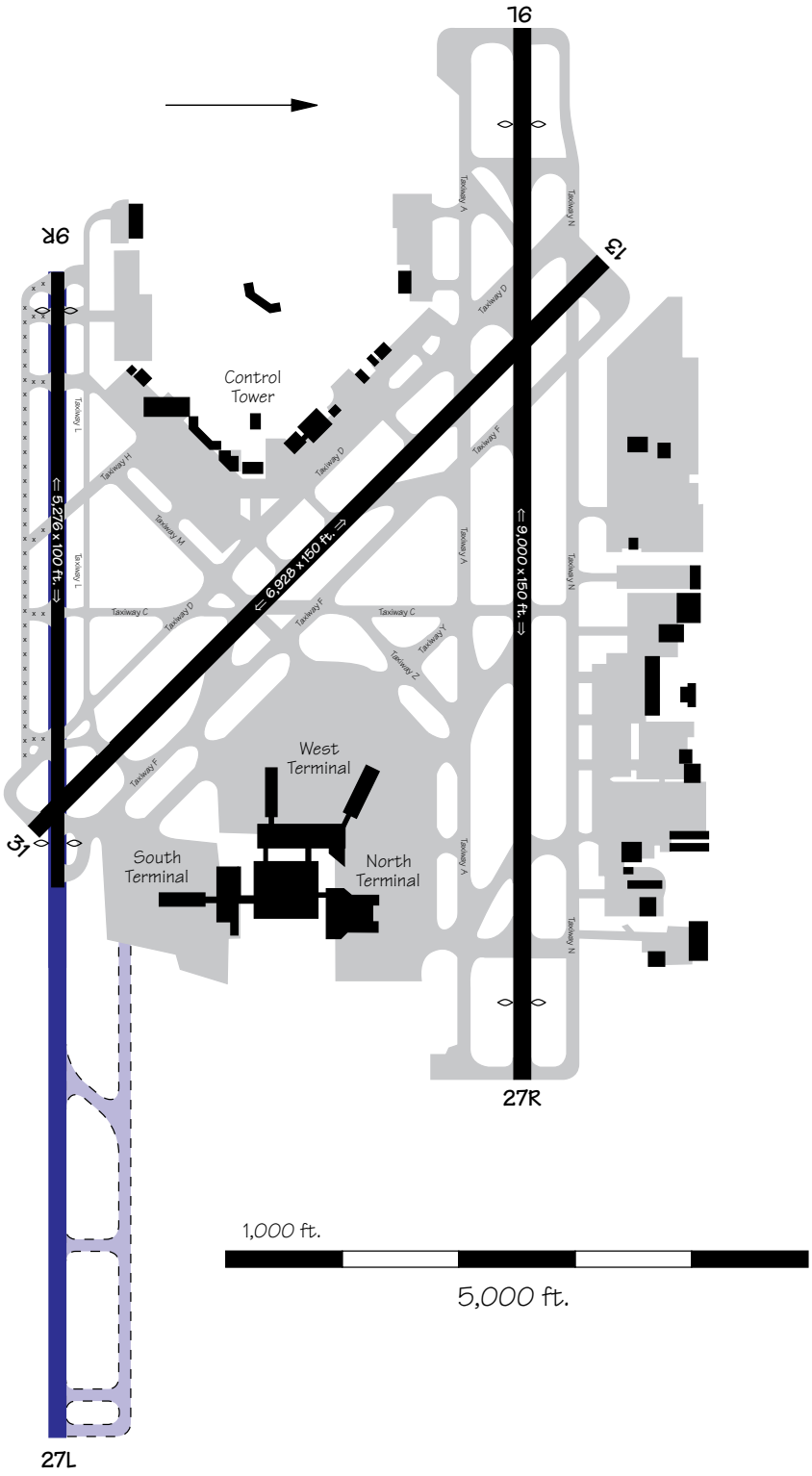
Detroit (DTW)

Runway 9R/27L is planned and will be located more than 4,300 feet from and parallel to existing Runway 9/27. The estimated cost is $85 million. This new runway will allow DTW to run independent parallel IFR approaches in an east-west configuration, thus matching its current north-south IFR arrival capabilities. Construction began in 1991 and should be completed in late 1993. A fourth north-south parallel, Runway 4/22, 2,667 feet west of Runway 3L/21R, is also planned. Construction is expected to begin in 1994 and should be completed in 1998. The estimated cost of construction is $90 million. This runway could potentially permit triple IFR arrivals with one dependent and one independent pairing. If approved, hourly IFR arrival capacity could increase from 57 to 71. An environmental assessment was submitted in September 1989, and a record of decision was issued in March 1990 for all three projects.



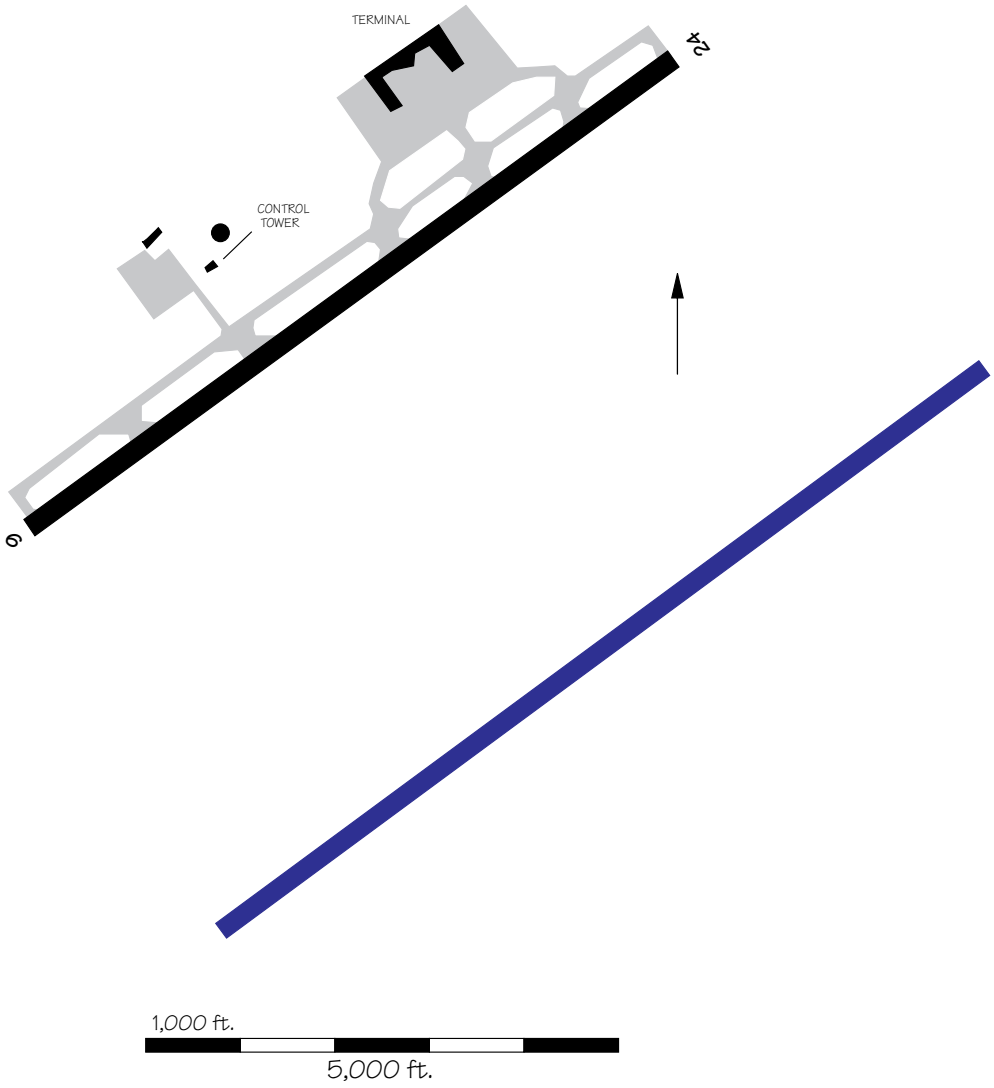
Fort Lauderdale (FLL)

An extension of the short parallel Runway 9R/27L to 6,000 or 10,000 feet long by 150 feet wide is planned to provide the airport with a second parallel air carrier runway. Construction is expected to begin in 1997. The estimated cost of construction is $96 million for the extension to 6,000 feet and $263 million for the extension to 10,000 feet. The anticipated operational date is 2000. This runway extension would permit IFR arrival capacity to increase from 29 to 57 per hour in an independent parallel operation, which would require a Precision Runway Monitor (PRM).



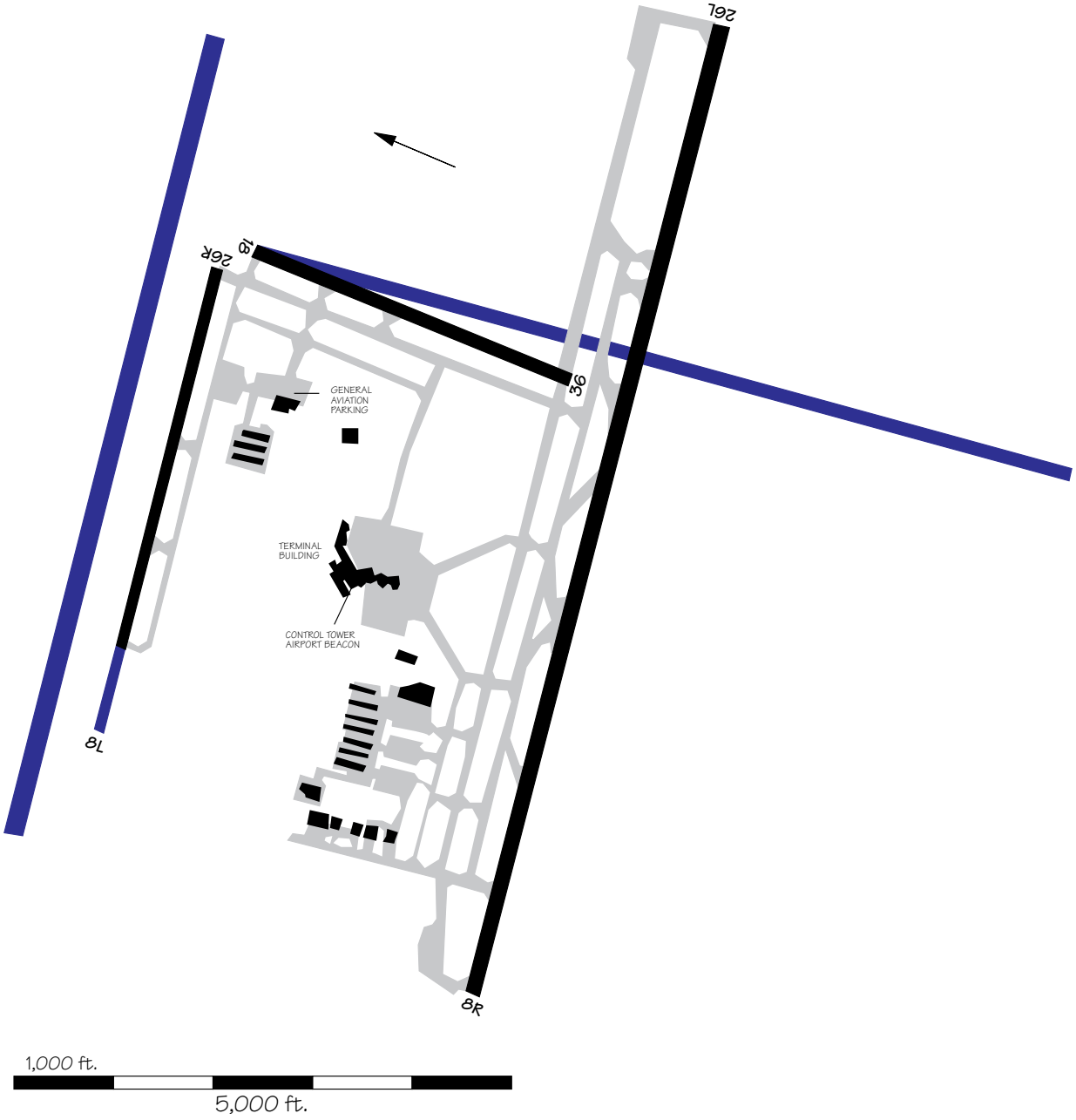
Fort Myers (RSW)

Planning has begun for a new 9,000 to 10,000 foot parallel runway, Runway 6R/24L, 4,300 feet or more from the existing air carrier runway. Construction is expected to begin in 1997. The new runway should be operational by 1999. The estimated cost of the project is $139 million. This new runway will support independent parallel operations, with the potential to increase IFR hourly arrival capacity from 29 to 57. Construction of an extension to Runway 6/24 from 8,400 feet to 12,000 feet is expected to begin in 1993. The estimated cost of the extension is $23 million, and the estimated operational date is 1994.



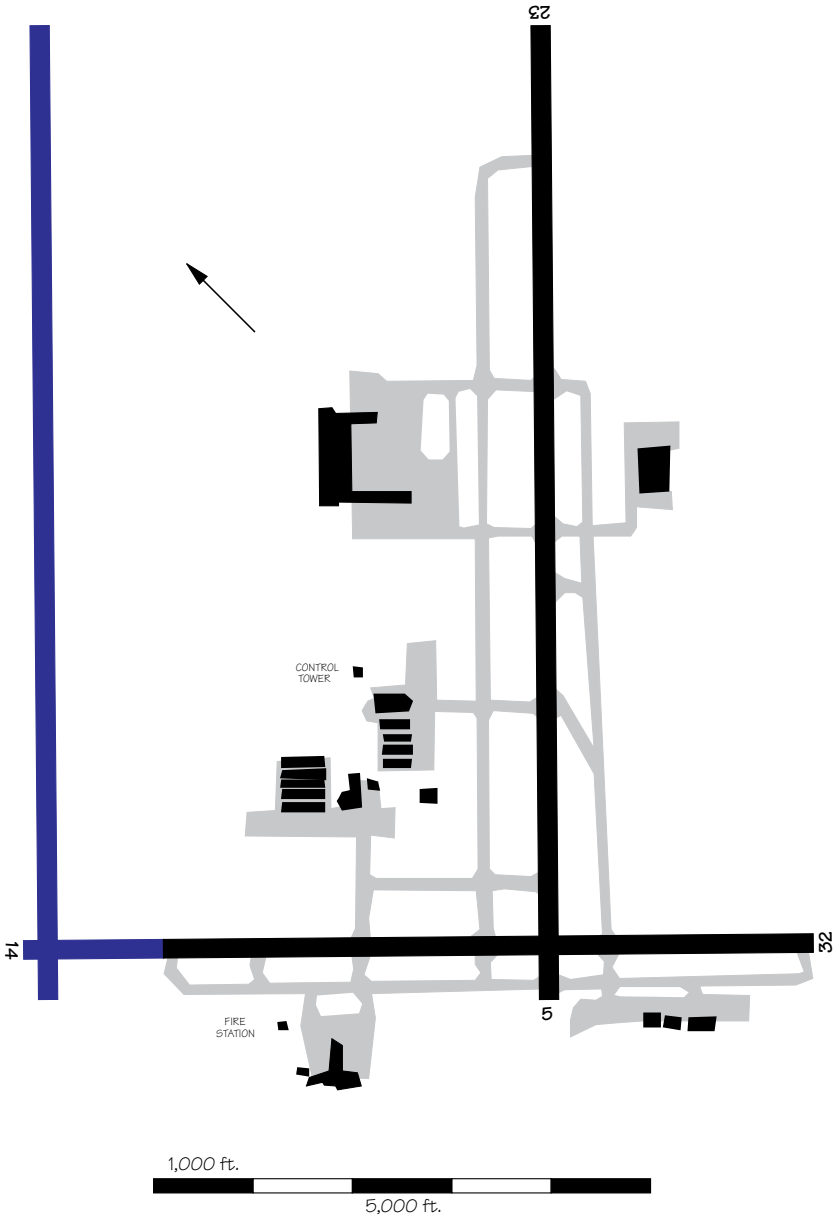
Grand Rapids (GRR)

An extension to the current Runway 8L/26R to 5,000 feet is planned for 1993. In the long-range plan, this runway will be converted into a taxiway for a new 7,000 foot runway. An extension to 8,500 feet and realignment are planned for the cross-wind Runway 18/36 (17/35). This construction is planned to start in 1994 and should be completed by 1997. The runway will provide wind coverage and reduce winter weather related delays by providing a second air carrier runway. Airport Layout Plan (ALP) and Environmental approvals for these projects were completed in January 1993.



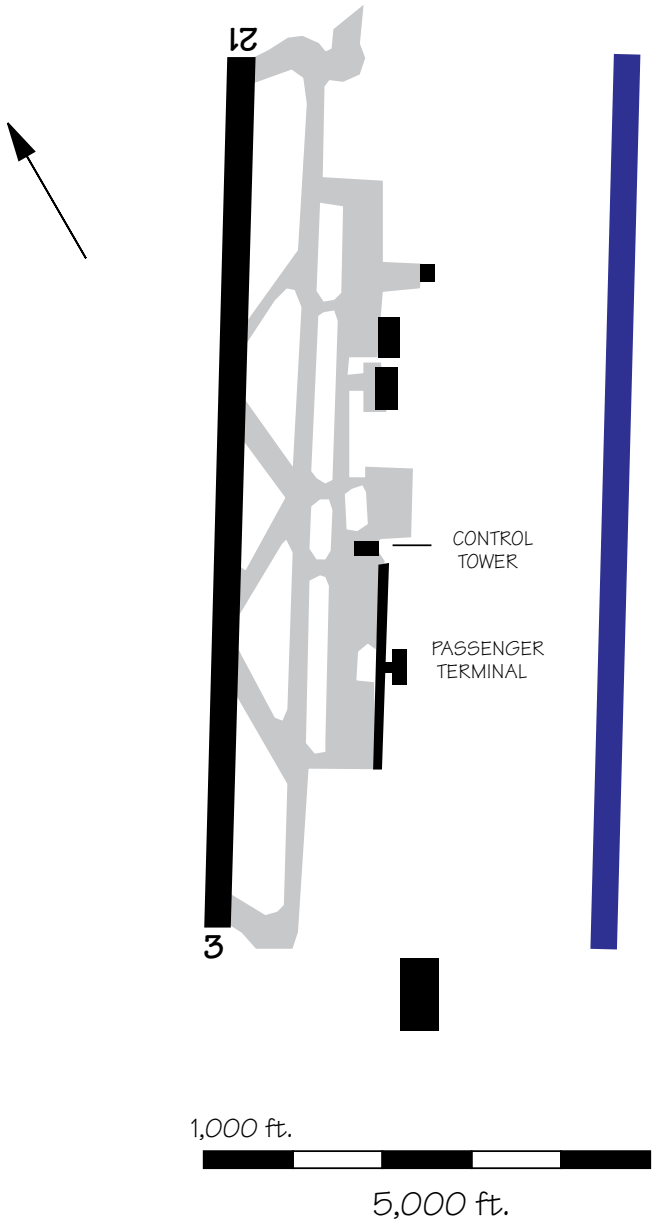
Greensboro (GSO)

A new parallel Runway 5L/23R, 5,000 feet northwest of the existing Runway 5/23 is under consideration. The new runway would permit independent parallel operations, potentially doubling hourly IFR arrival capacity from 29 to 57. The estimated cost of the 7,000-foot long parallel runway is $20 million. It is planned to be completed in 2010. In addition, a 1,200-foot extension to Runway 14/32 is under review.



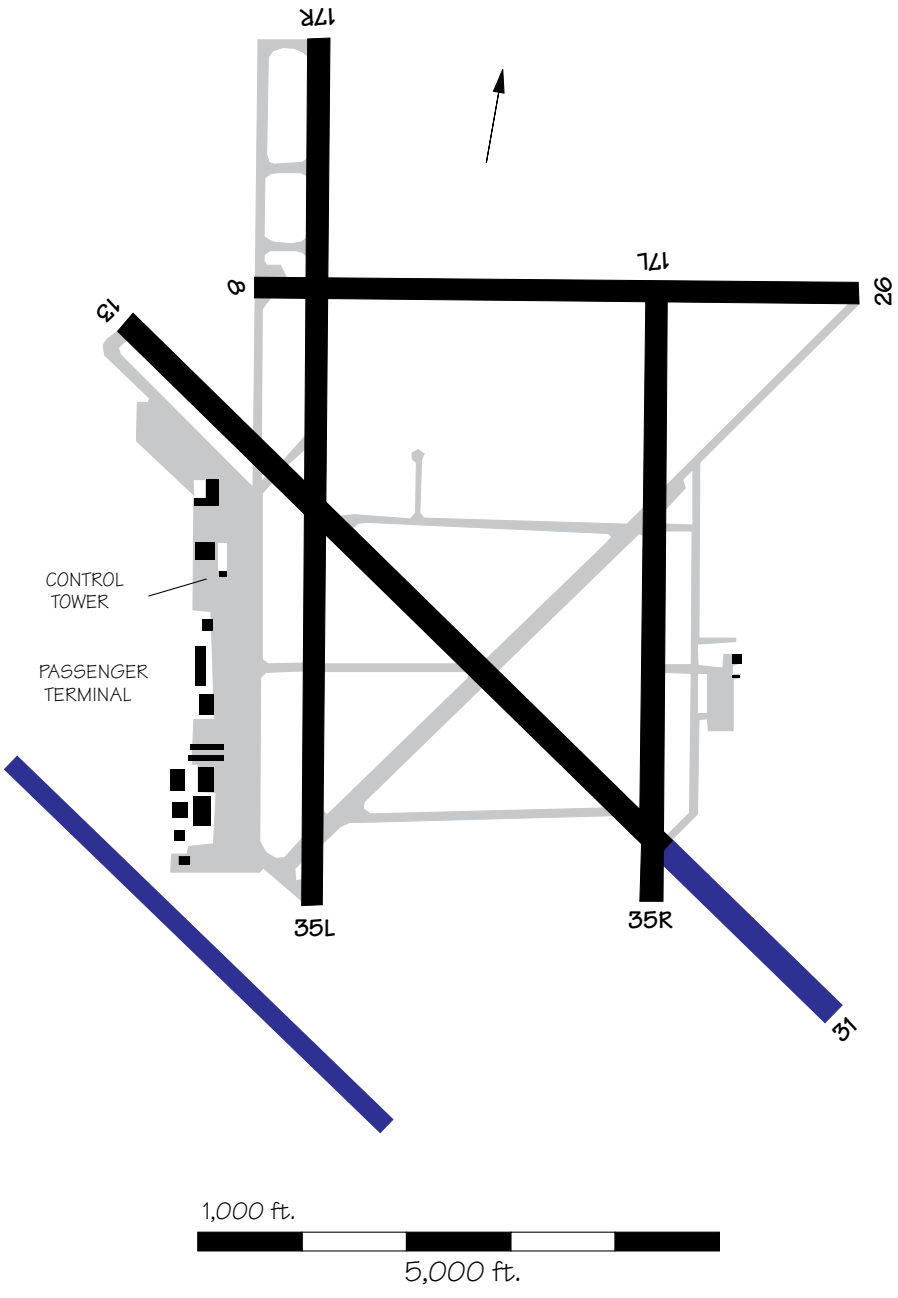
Greer Greenville-Spartanburg (GSP)

A new parallel runway, Runway 3R/21L, is anticipated in 1999 at a cost of $25 million. Presently, its planned length is 10,000 feet with a 4,300 foot separation from Runway 3/21. This would potentially double hourly IFR arrival capacity from 29 to 57. Also, an extension of Runway 3L/21R to 10,000 feet is planned. Construction is expected to be completed in 1995 at a cost of $12 million.



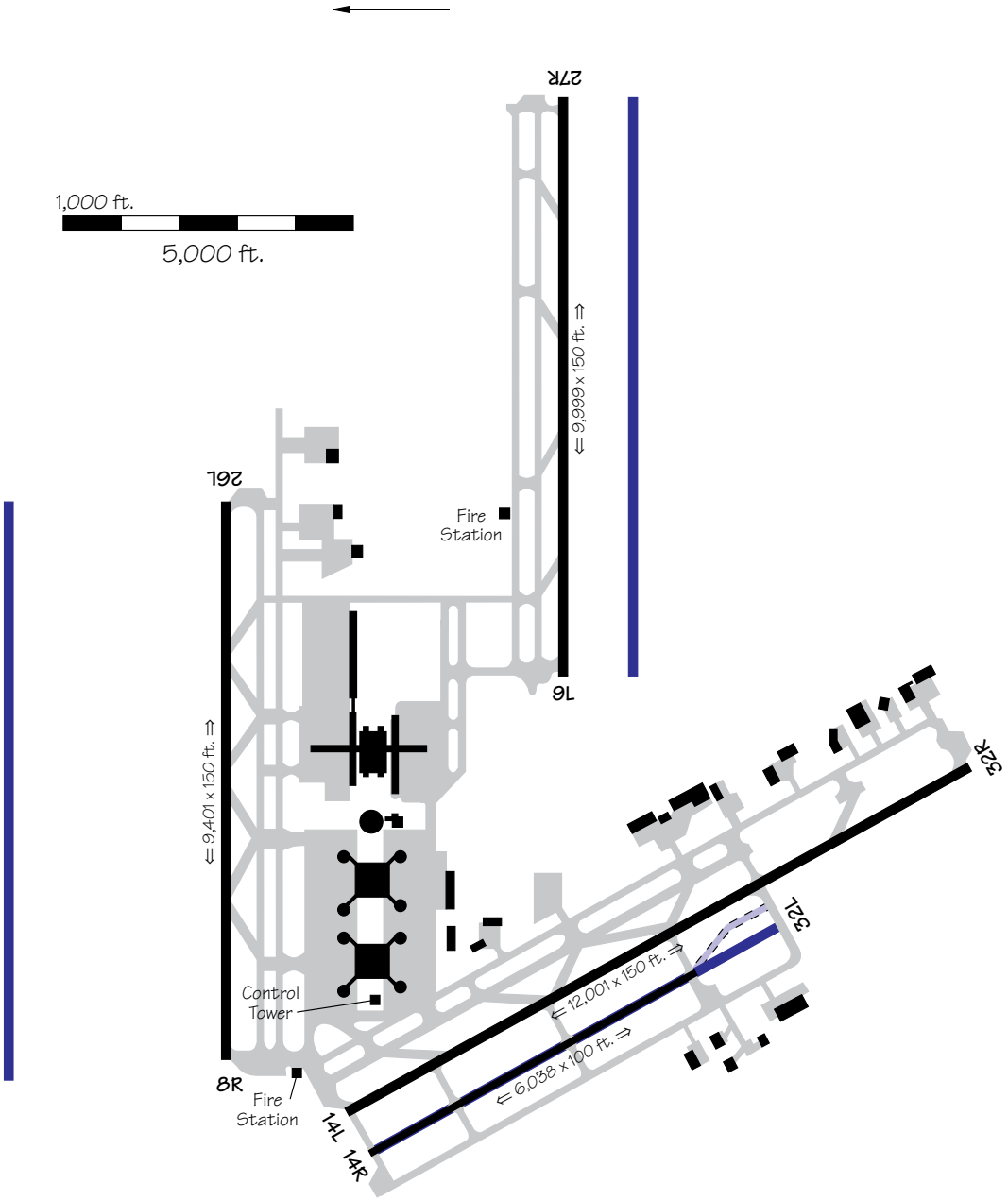
Harlingen (HRL)

An extension to Runway 13/31 and a new parallel GA runway, Runway 13L/31R, are being planned. The extension to Runway 13/31 will bring the runway length to 9,500 feet at an estimated cost of $6.7 million. Construction is anticipated to begin in 1994 and should be completed in 1995. The new GA runway, Runway 13L/31R, will be 5,000 feet long. Construction is expected to begin in 1994. Runway 13L/31R should be operational in 1995–2000 at a cost of $5 million.



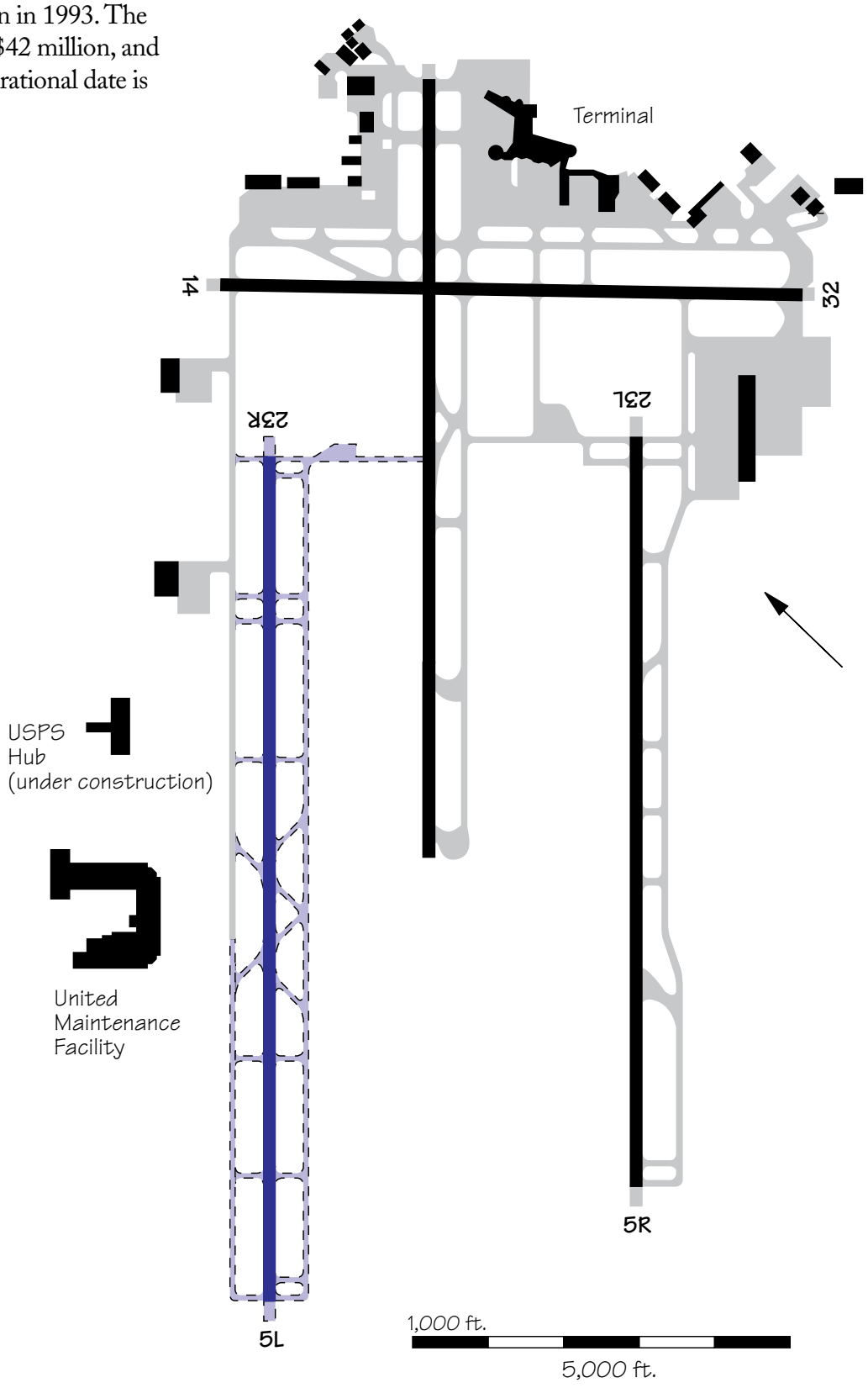
Houston (IAH)

An $8 million 2,000-foot extension to Runway 14R/32L is planned to be operational in 1997. Construction is expected to begin in 1996, with completion in 1997. A new Runway 8L/26R is planned to be completed sometime in 1999. Construction should begin in 1997 and is estimated to cost $44 million. This runway will be parallel to and north of the existing Runway 8/26. The spacing between these two runways will be 3,500 feet. Runway 8L/26R, in conjunction with Runways 9/27 and 8/26, has the potential to support triple IFR approaches, if approved, which could increase hourly IFR arrival capacity from 57 to 86. Another new runway, parallel to and south of Runway 9/27 is also planned. Construction is expected to begin in 1999 and be completed in 2002, also at a cost of $44 million. This runway will be separated from Runway 9/27 by only 1,000 feet, which, while not supporting additional IFR arrival capacity, would increase available departure capacity.



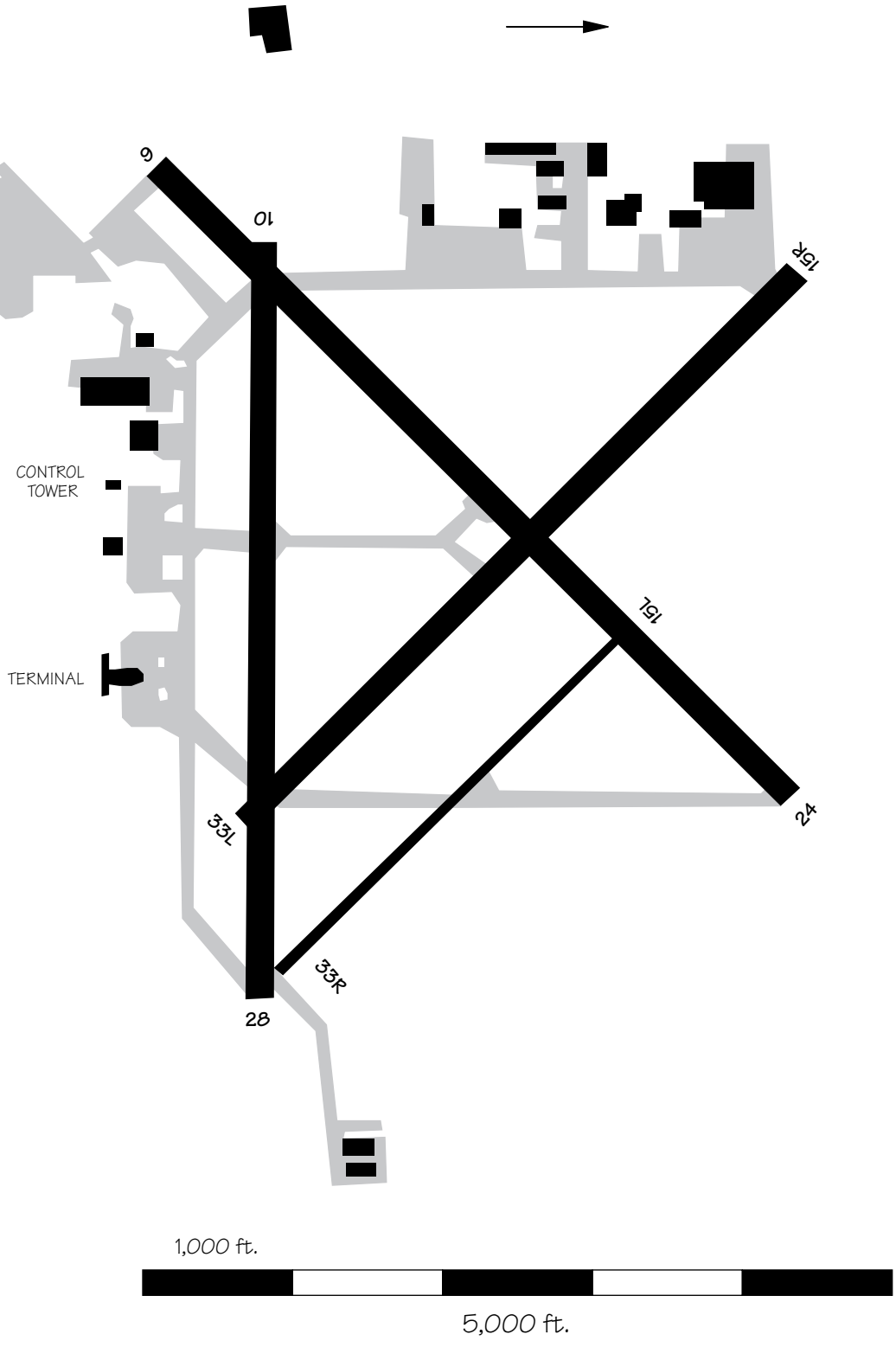
Indianapolis (IND)

Construction of a replacement for Runway 5L/23R is scheduled to begin in 1993. The estimated cost is $42 million, and the estimated operational date is 1996.



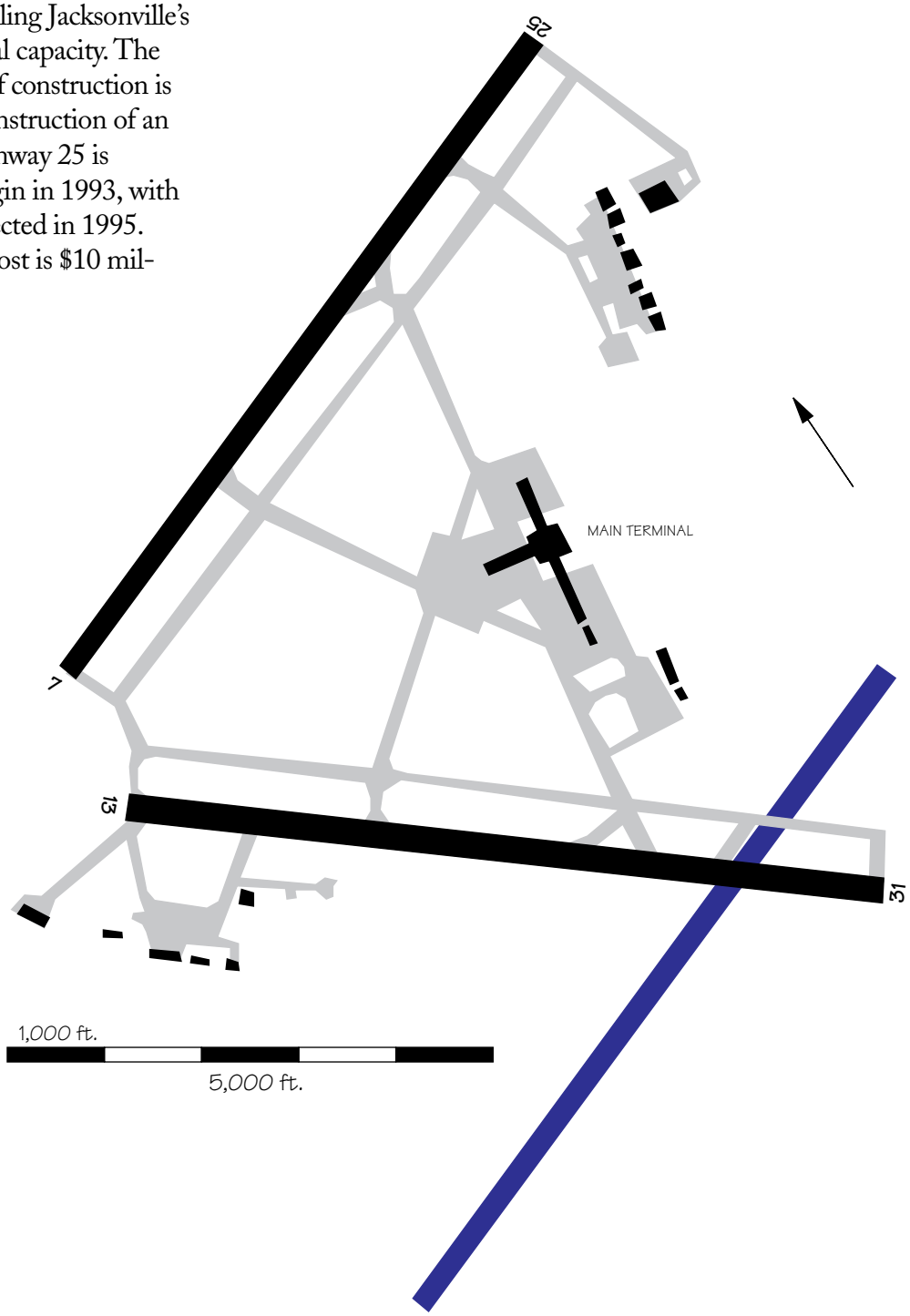
Islip (ISP)

A 1,000 foot extension to Runway 6/24 is under consideration.



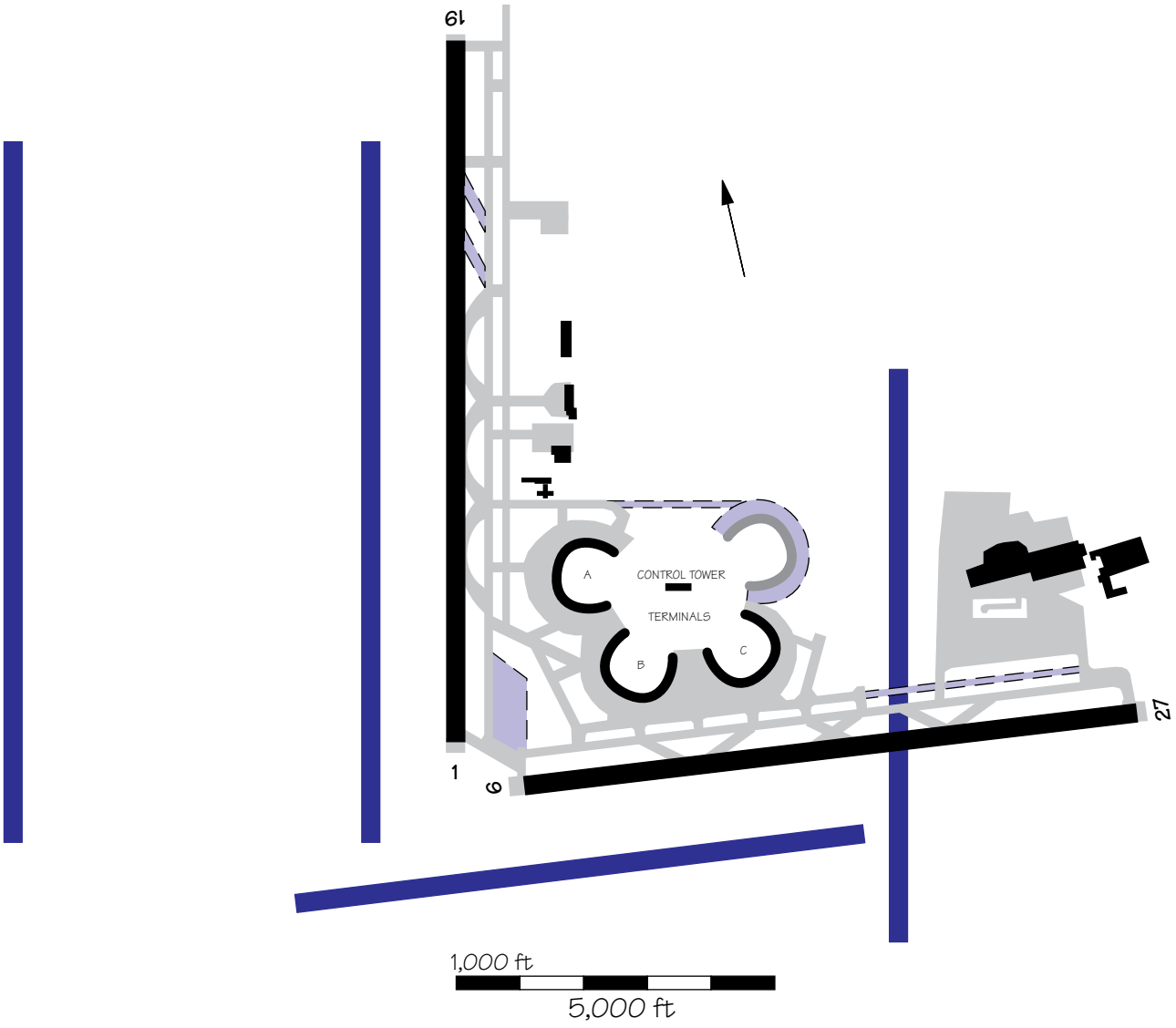
Jacksonville (JAX)

A new Runway 7R/25L is planned. It will be 6,500 feet south of the existing Runway 7/25, permitting independent parallel IFR operations and potentially doubling Jacksonville's hourly IFR arrival capacity. The estimated cost of construction is $37 million. Construction of an extension to Runway 25 is scheduled to begin in 1993, with completion expected in 1995. The estimated cost is $10 million.



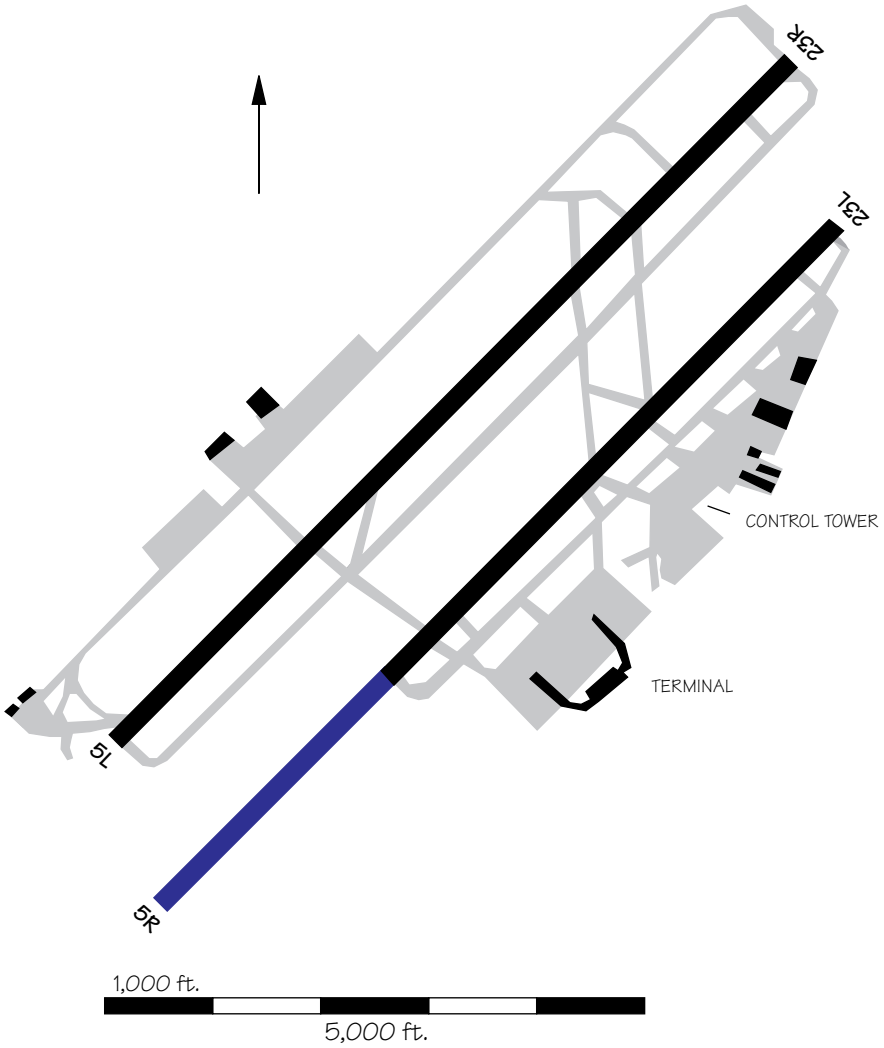
Kansas City (MCI)

A new north-south parallel Runway 1R/19L is currently under construction. Located 6,575 feet east of existing Runway 1/19, it will permit independent parallel IFR operations. The estimated cost of construction is $46.2 million. A new Runway 9R/27L is proposed 1,400 feet south of the existing Runway 9/27. Runway 18L/36R is under consideration for construction after 2000. This new runway will be 1,400 feet from, parallel to, and west of the existing Runway 1/19. Runway 18R/36L is proposed for the longer term. This runway would be located 6,200 feet west of Runway 18L/36R. The construction of this runway would allow triple IFR approaches, increasing average hourly IFR arrival capacity from 57 to 86.



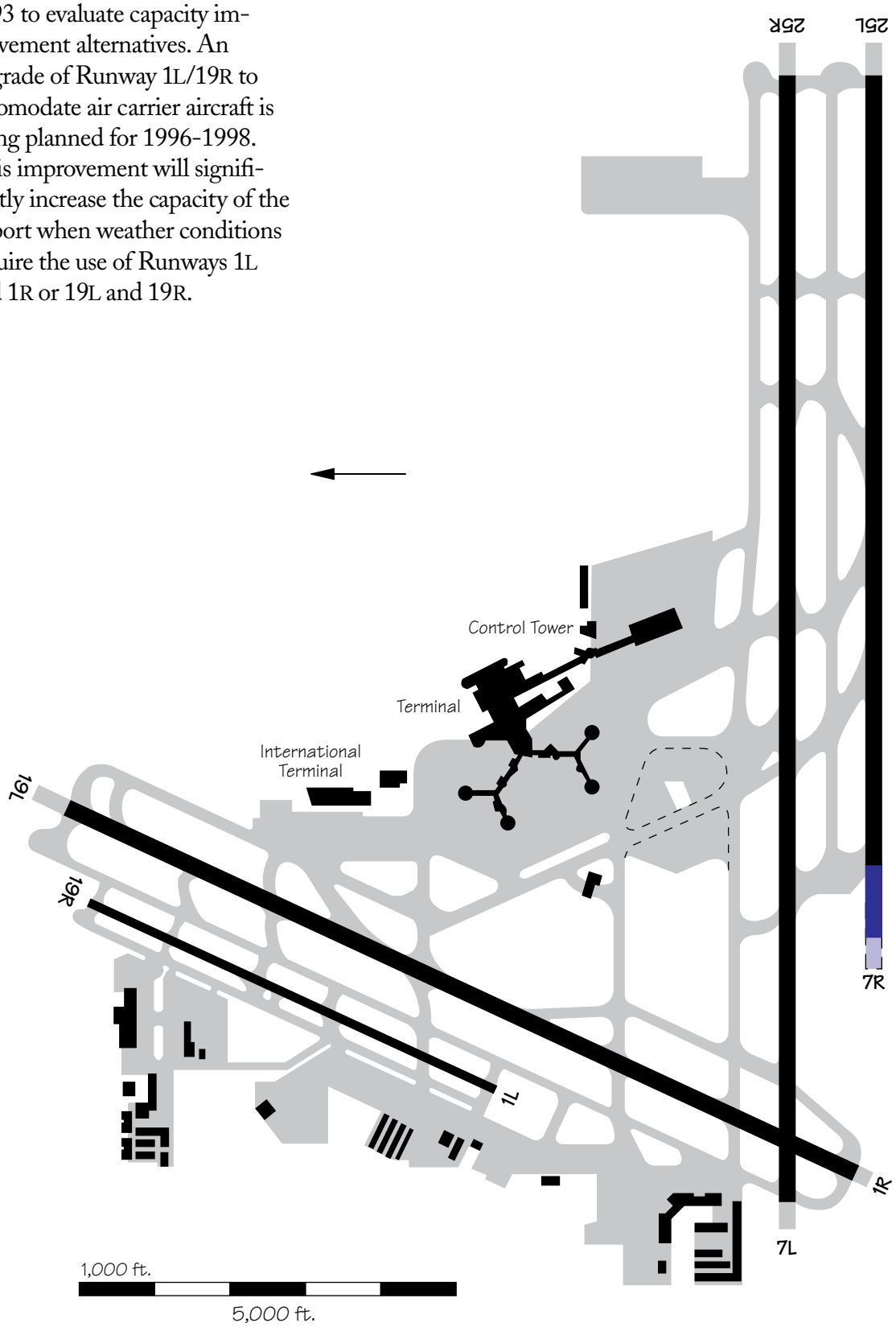
Knoxville (TYS)

A 3,000-foot extension of Runway 5R/23L to 9,000 feet is now complete and operational. Construction began in June 1989 and cost $17.4 million.



Las Vegas (LAS)

An Airport Capacity Design Team Project began in January 1993 to evaluate capacity improvement alternatives. An upgrade of Runway 1L/19R to accomodate air carrier aircraft is being planned for 1996-1998. This improvement will significantly increase the capacity of the airport when weather conditions require the use of Runways 1L and 1R or 19L and 19R.



Los Angeles (LAX)

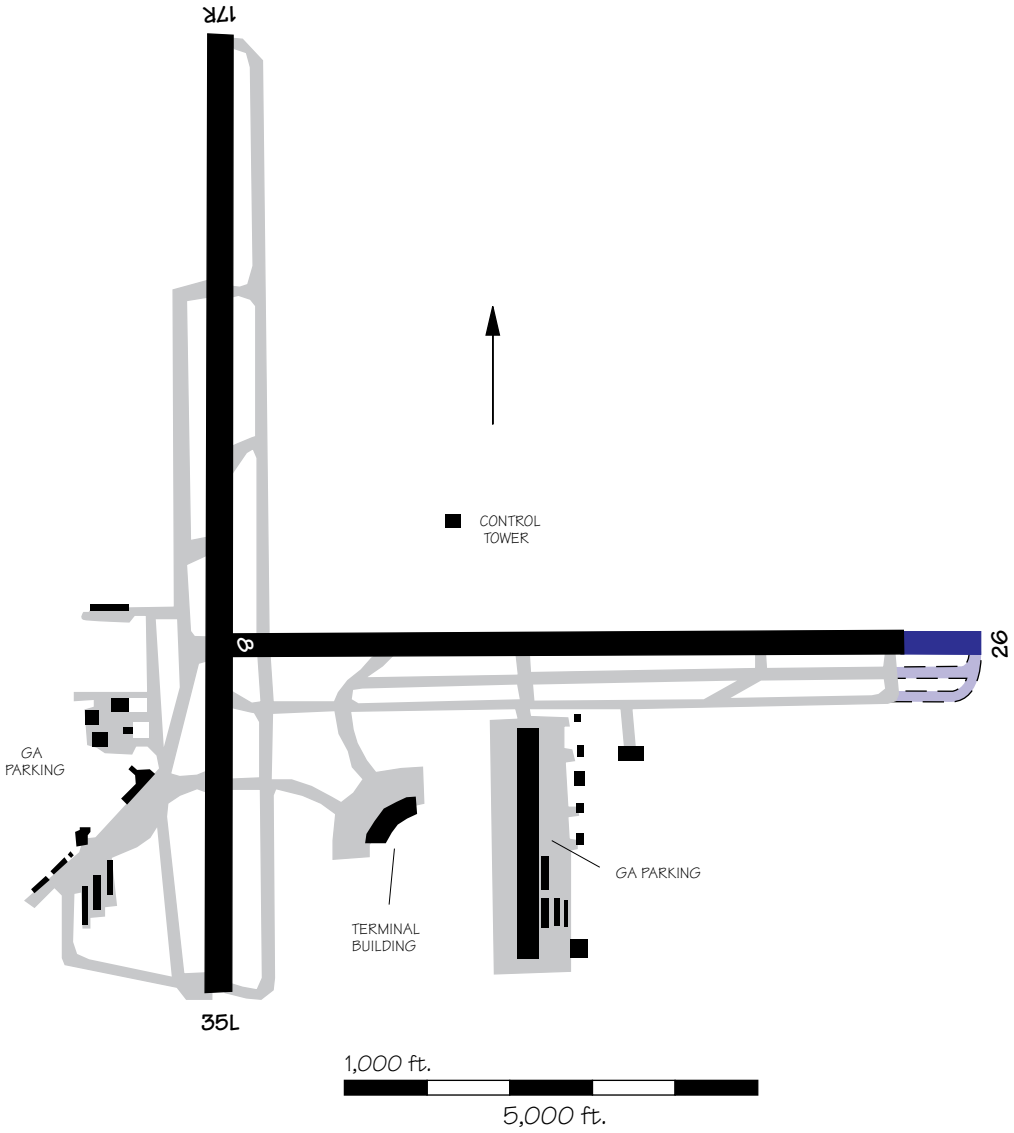
Current plans are to extend Runway 6L/24R 1,360 feet to the west, to a length of 10,285 feet. This will improve the take-off capability of Runway 24R to equal that of Runway 24L. The estimated cost of construction is approximately $4 million.

Louisville (SDF)

Plans have begun for two new parallel runways, 4,950 feet apart. They will be numbered Runways 17R/35L and 17L/35R and will be 10,000 and 7,800 feet long, respectively. They will replace Runway 1/19, which will be closed. The estimated cost of construction is $250 million, and construction is scheduled to begin in 1993. The east runway is expected to be operational in 1997. The west runway is expected to be operational in 1996, permitting independent parallel IFR operations and increasing hourly IFR arrival capacity from 29 to 57.

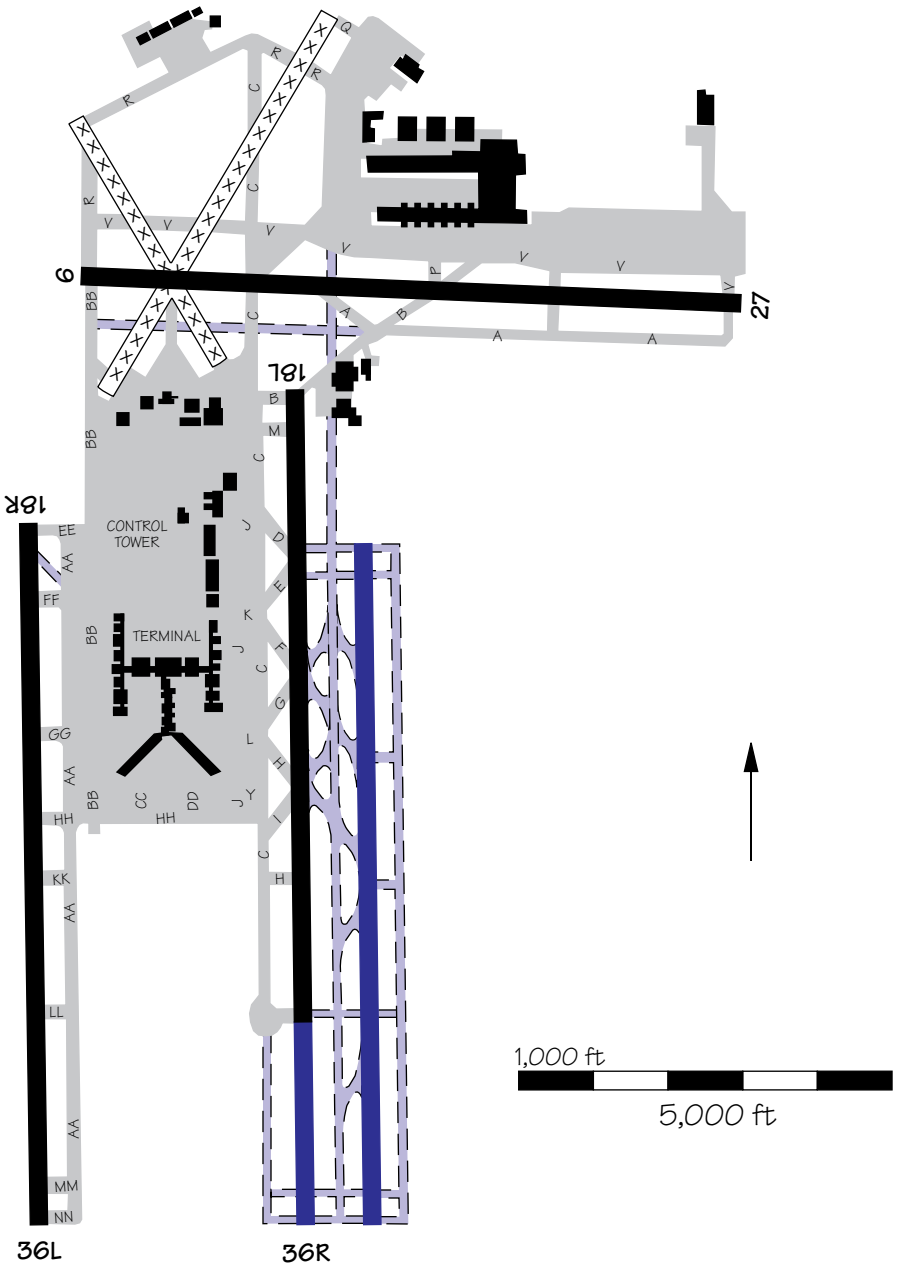
Lubbock (LBB)

An extension to Runway 8/26 is planned. The expected start of construction is 1994 and the estimated cost is $6.2 million. It is anticipated that the extension will become operational in 1995.



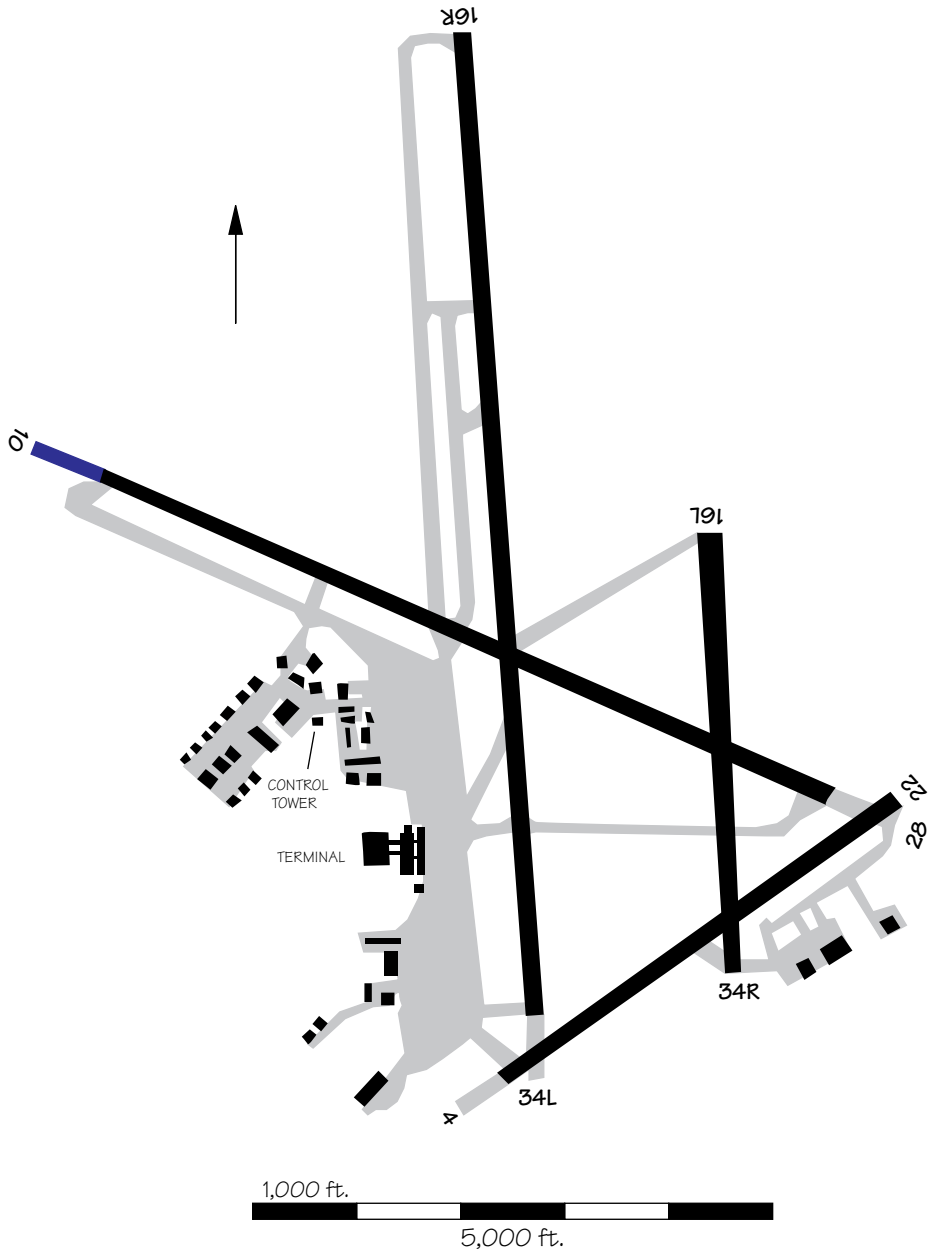
Memphis (MEM)

A new north-south runway, Runway 18E/36E, is planned, and this new runway will be parallel to the existing pair of runways. It will tentatively be located 900 feet east of Runway 18L/36R and 4,300 feet from Runway 18R/36L, thus allowing independent parallel approaches. This would double present hourly IFR arrival capacity. Construction should be completed in late 1995. The estimated cost is $105 million. An extension of Runway 36R is also planned. Construction is expected to be completed by 1997 at a cost of $10 million.



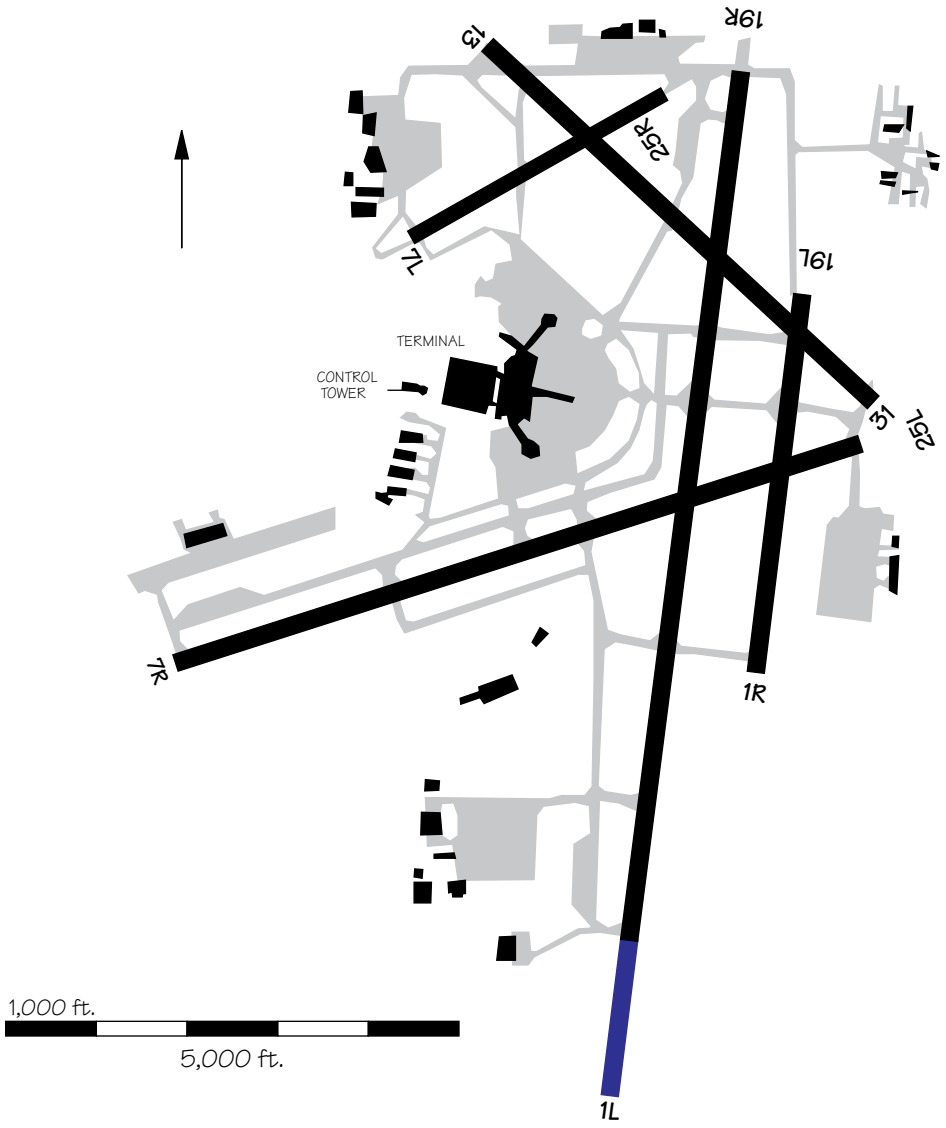
Midland (MAF)

An extension to Runway 10/28 is planned, and construction is scheduled to begin in 1994. The extension should be completed in 1995. The estimated cost of construction is $11 million.



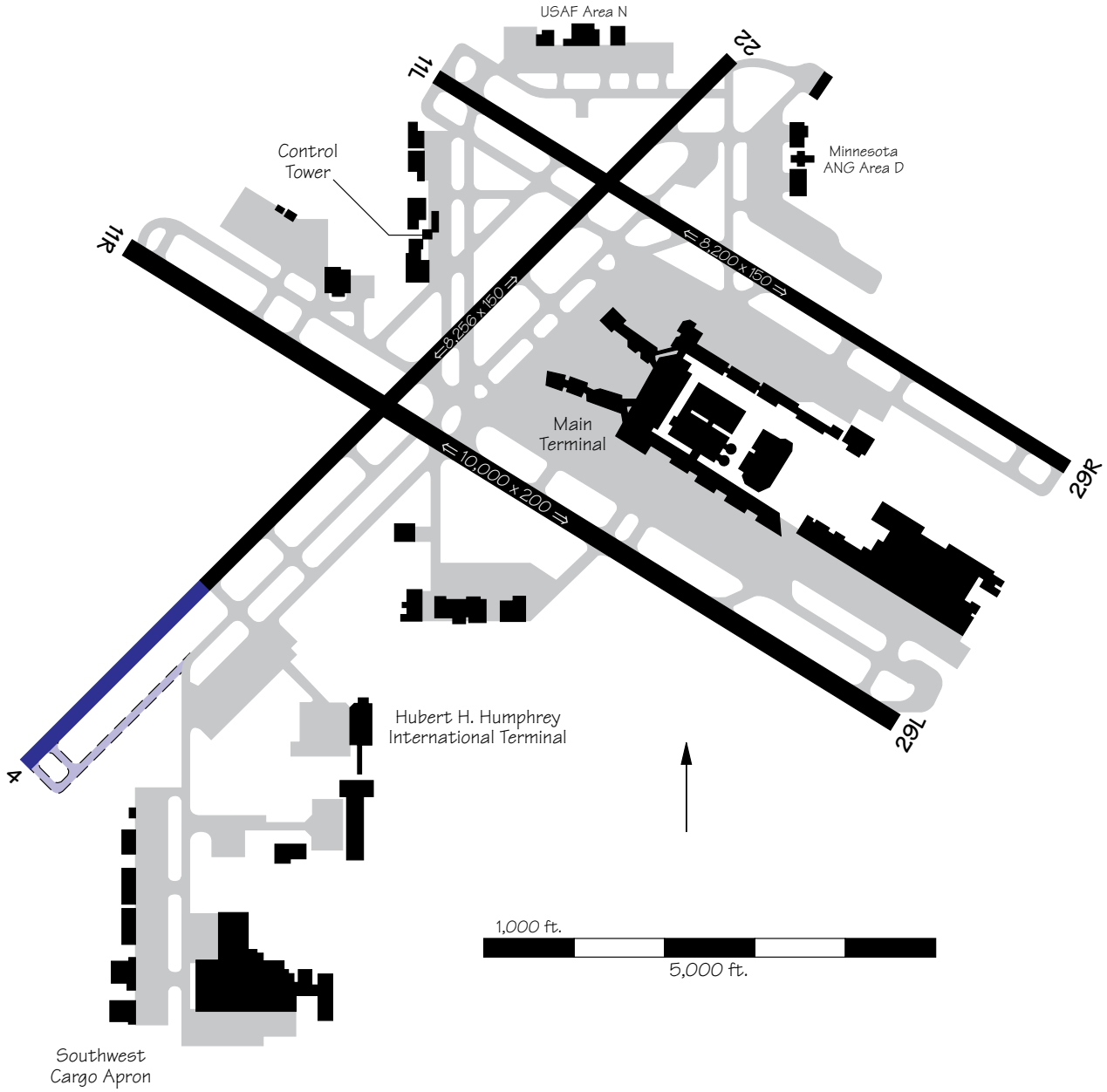
Milwaukee (MKE)

Runway 1L/19R is proposed to be extended 2,000 feet to the south for a total length of 11,600 feet. Construction is scheduled to begin in June 1994 and should be completed in August 1995 at a cost of $13 million. A new parallel Runway 7R/25L is planned in the future.



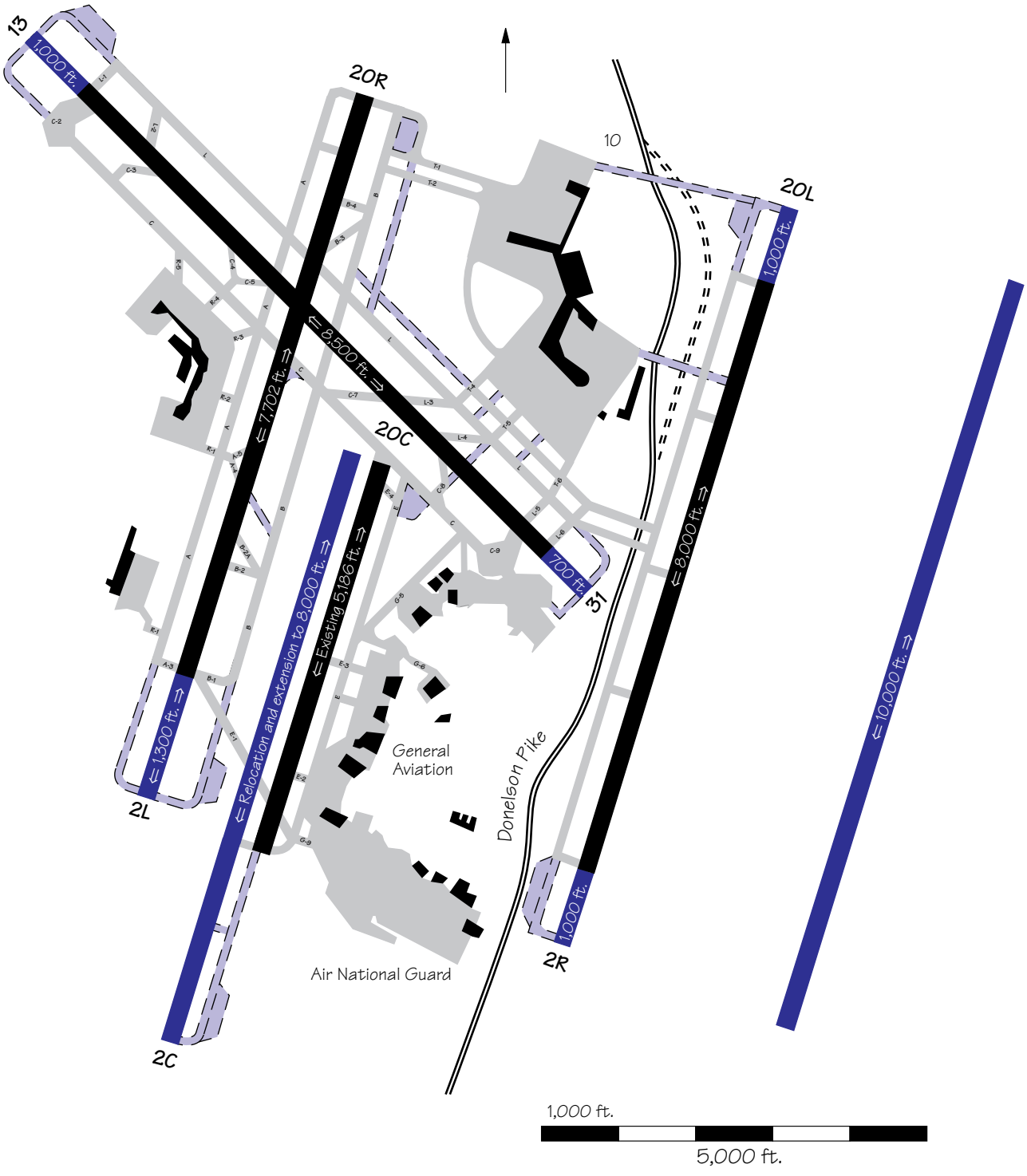
Minneapolis (MSP)

An extension of Runway 4/22 2,750 feet to the southwest is proposed, which would bring the runway length to 11,000 feet. Construction is scheduled to begin in June 1994, and the extension should be operational in late 1994. The estimated cost of construction is $15 million.



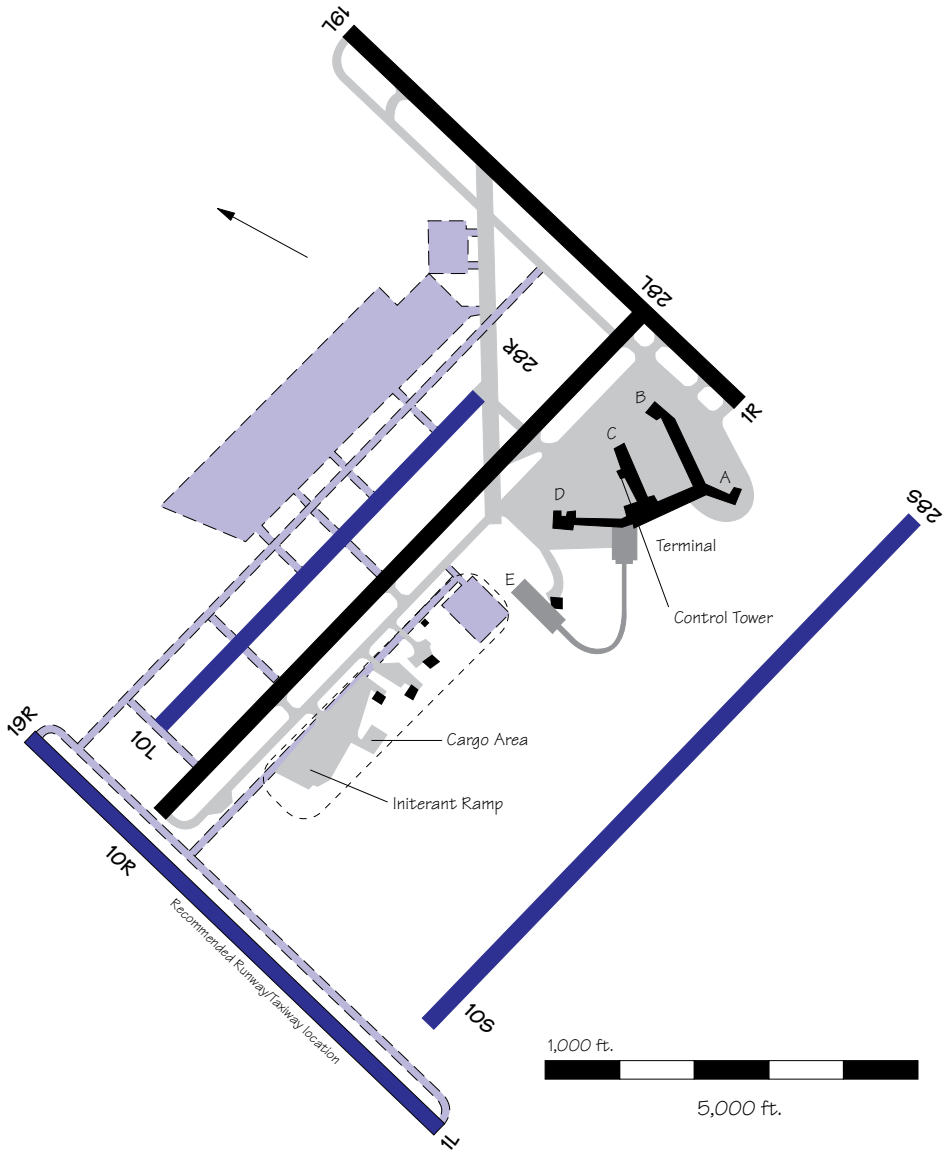
Nashville (BNA)

The relocation and extension of Runway 2C/20C is under construction. The runway should be operational in 1994, and the estimated cost of the project is $34 million. The extension of Runway 13 is also under construction and is expected to be completed in 1994. A new Runway 2E/20E is planned for the future between 1,500 and 3,000 feet from Runway 2R/20L. In addition, extensions to Runways 2R/20L and 2L/20R are planned.



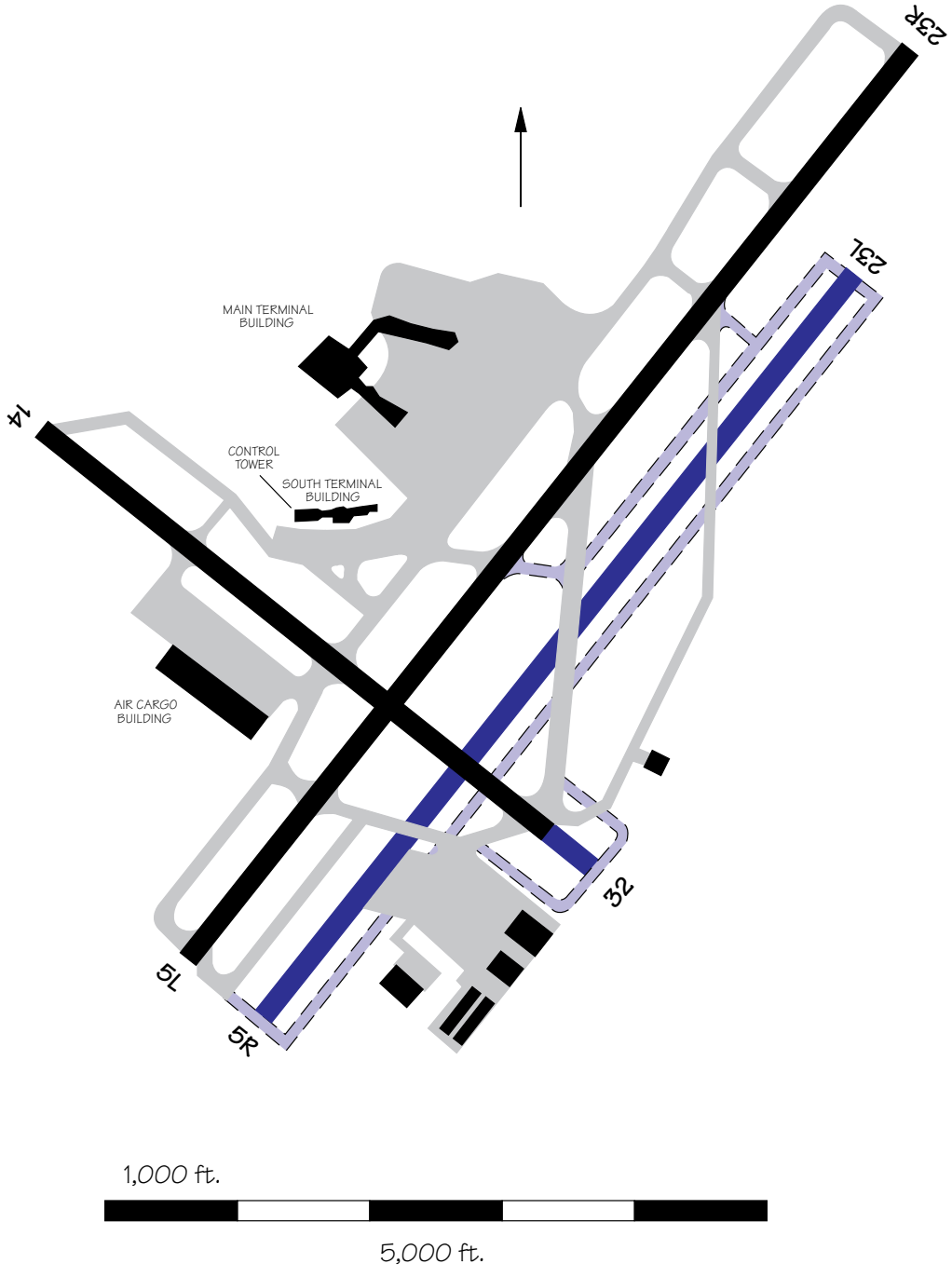
New Orleans (MSY)

A new north-south runway, Runway 1L/19R, is planned. This new runway will be parallel to the existing Runway 1/19 and will be located west of the threshold of Runway 10, approximately 11,000 feet away from Runway 1/19. This will allow independent parallel operations, doubling IFR hourly arrival capacity. Pending environmental approvals, construction could begin as early as January 1995 and be completed in 2000, at an approximate cost of $205 million. As an alternative to this north-south runway, the airport is considering the construction of an east/west parallel runway, Runway 10S/28S, 4,300 feet to the south of existing Runway 10/28, off of present airport property. The airport is also planning to construct a north parallel east/west taxiway approximately 800 feet north of and parallel to the existing Runway 10/28, which could later be converted into a 6,000-foot commuter and general aviation runway. The site preparation phase of the taxiway construction has already begun. The estimated cost of construction is $25.5 million, and the expected operational date is 1995.



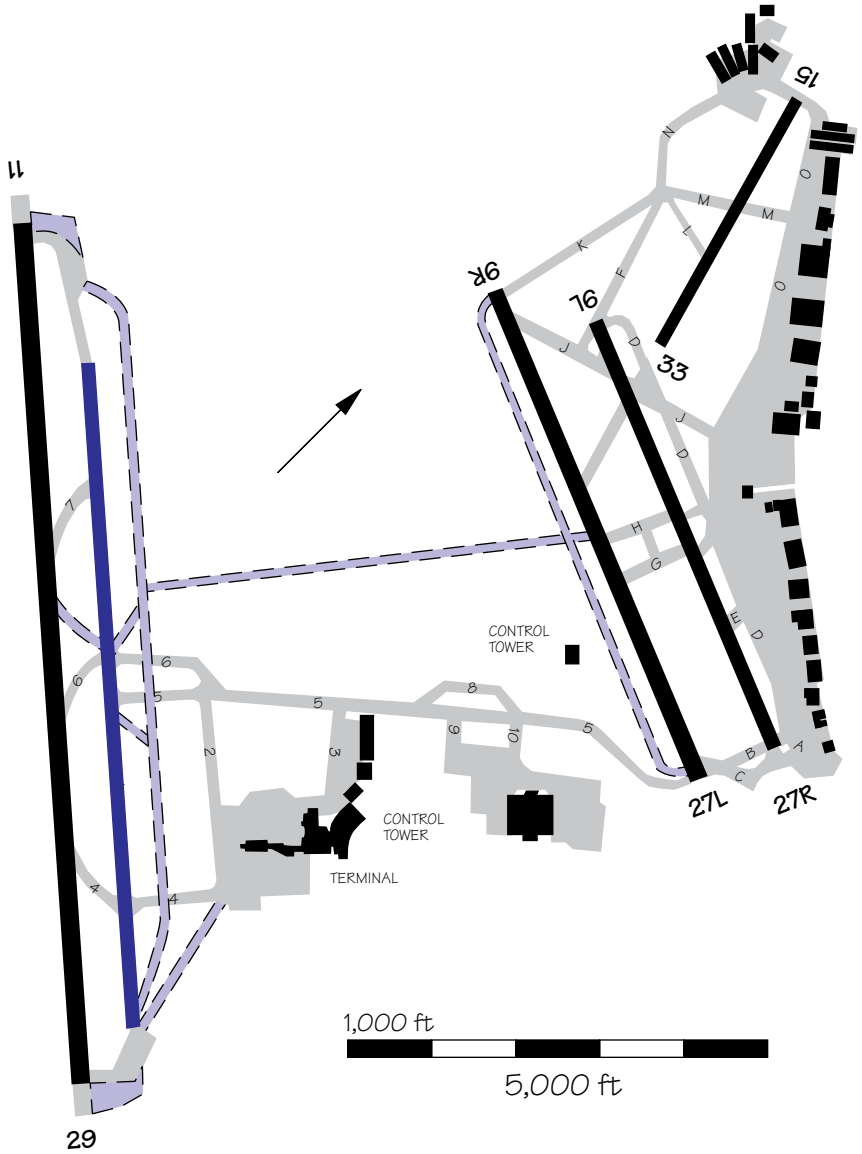
Norfolk (ORF)

A new runway, Runway 5R/23L, parallel to and 900 feet southeast of the main Runway 5/23, is being planned. Completion of this new parallel would not increase hourly IFR arrival capacity, but would add additional departure capacity. It is estimated that the runway will be operational in 1994 at a cost of $13 million. Construction began in July 1992. An extension to Runway 14/32 is also planned. The estimated cost is $2 million and the runway is expected to be operational in October 1996.



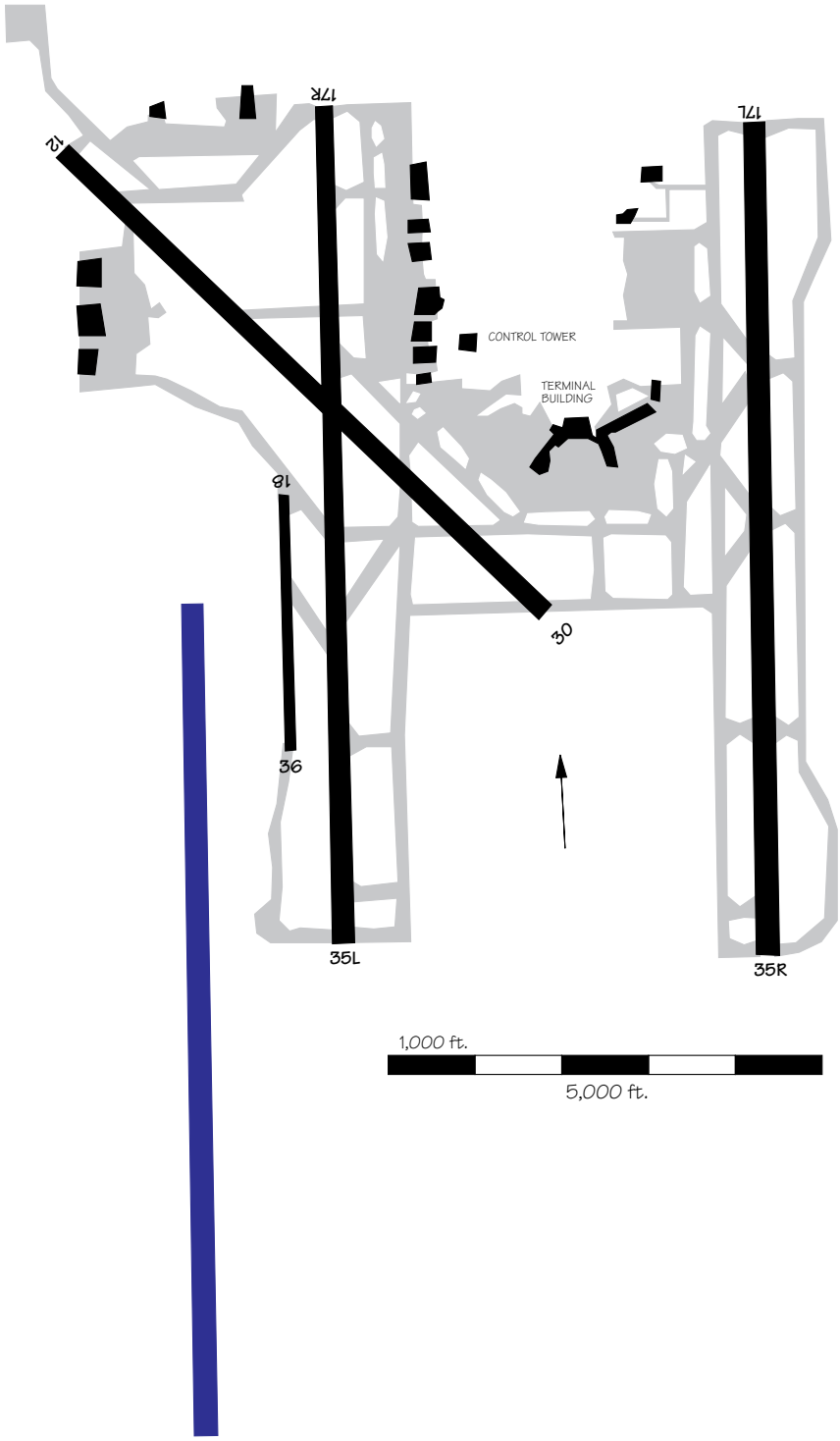
Oakland (OAK)

A new Master Plan update is underway considering construction of an air carrier runway, Runway 11R/29L. The estimated cost of construction is $143 million.



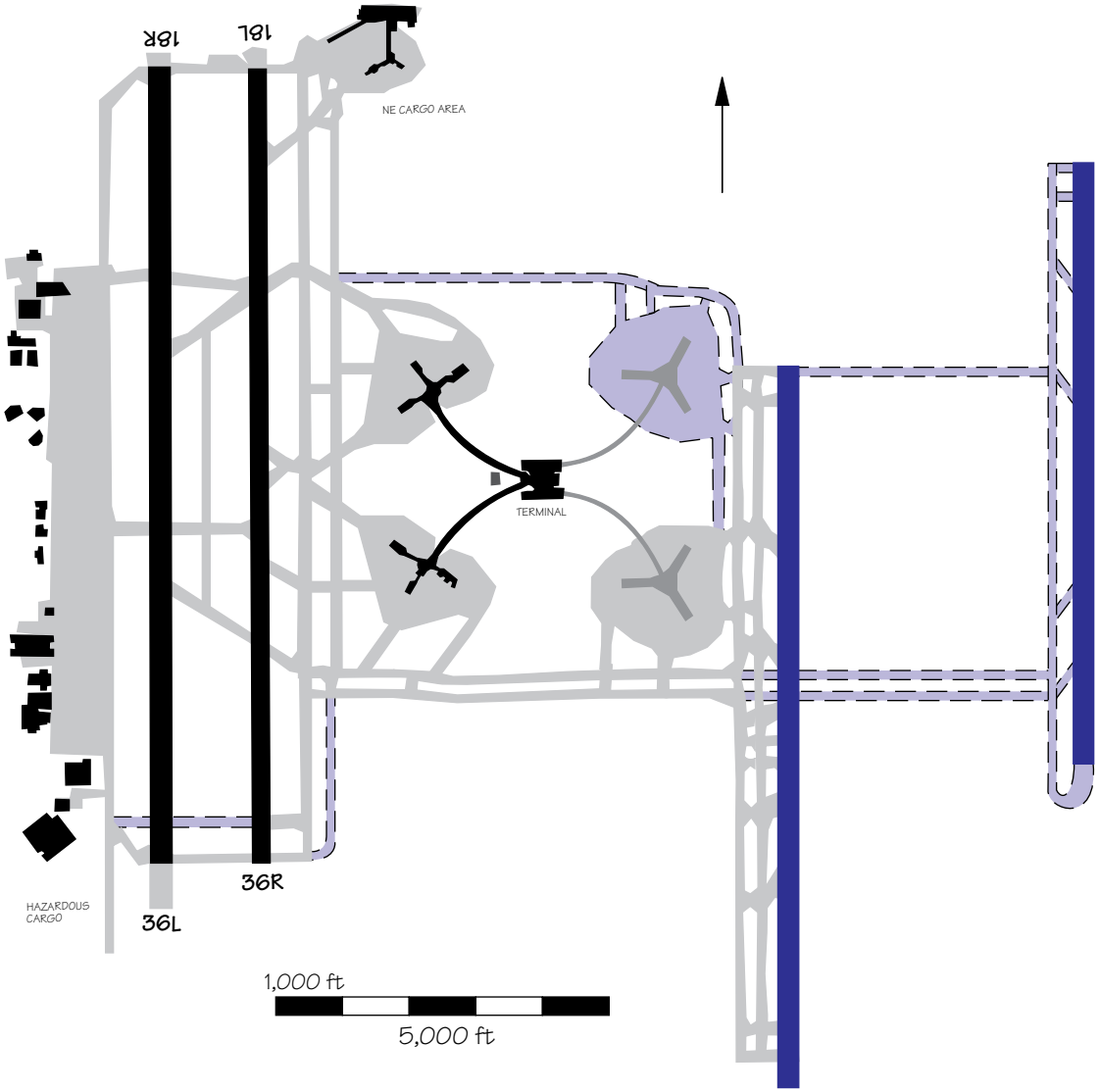
Oklahoma City (OKC)

Extensions to both north/south runways to the south to 12,500 feet are planned. It is anticipated that the extensions will be operational in 2001. The estimated cost of extending Runway 17R/35L is $20 million; the estimated cost of extending Runway 17L/35R is $24 million. Plans also exist for a 10,000 foot parallel runway 1,600 feet west of Runway 17R/35L. The estimated cost of construction is $55 million, and the estimated operational date is October 2001.



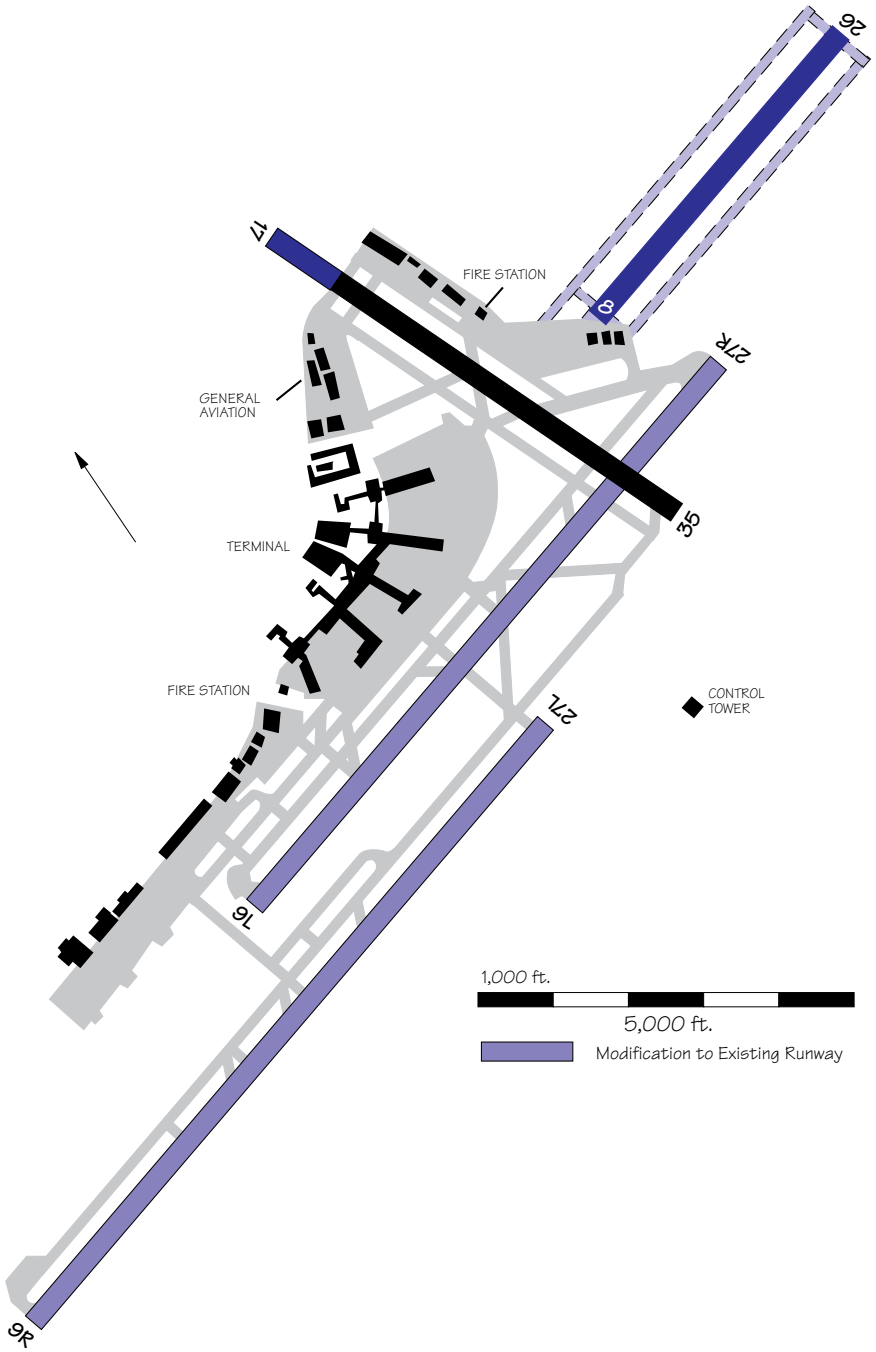
Orlando (MCO)

A fourth north-south runway, Runway 17L/35R, is expected to be operational in 1997. It will be located 4,300 feet east of the third runway, Runway 17R/35L. This may permit triple independent IFR operations. The estimated cost of construction of this runway is $100 million.



Philadelphia (PHL)

A 600-foot extension of Runway 17/35 is currently planned. In addition, the inner parallel, Runway 9L/27R, will shift 400 feet south closer to Runway 9R/27L. The extension of Runway 17/35 and relocation of Runway 9L/27R would effectively eliminate the intersection of the two runways and increase their respective capacities during most conditions of wind and weather. The relocated Runway 9L/27R is expected to be operational in January 1997 at an estimated cost of $109 million. The estimated cost of extending Runway 17/35 is $17 million. A new 5,000-foot parallel commuter runway, Runway 8/26, has been proposed and would be located 3,000 feet north of Runway 9R/27L. The estimated cost is $169 million.

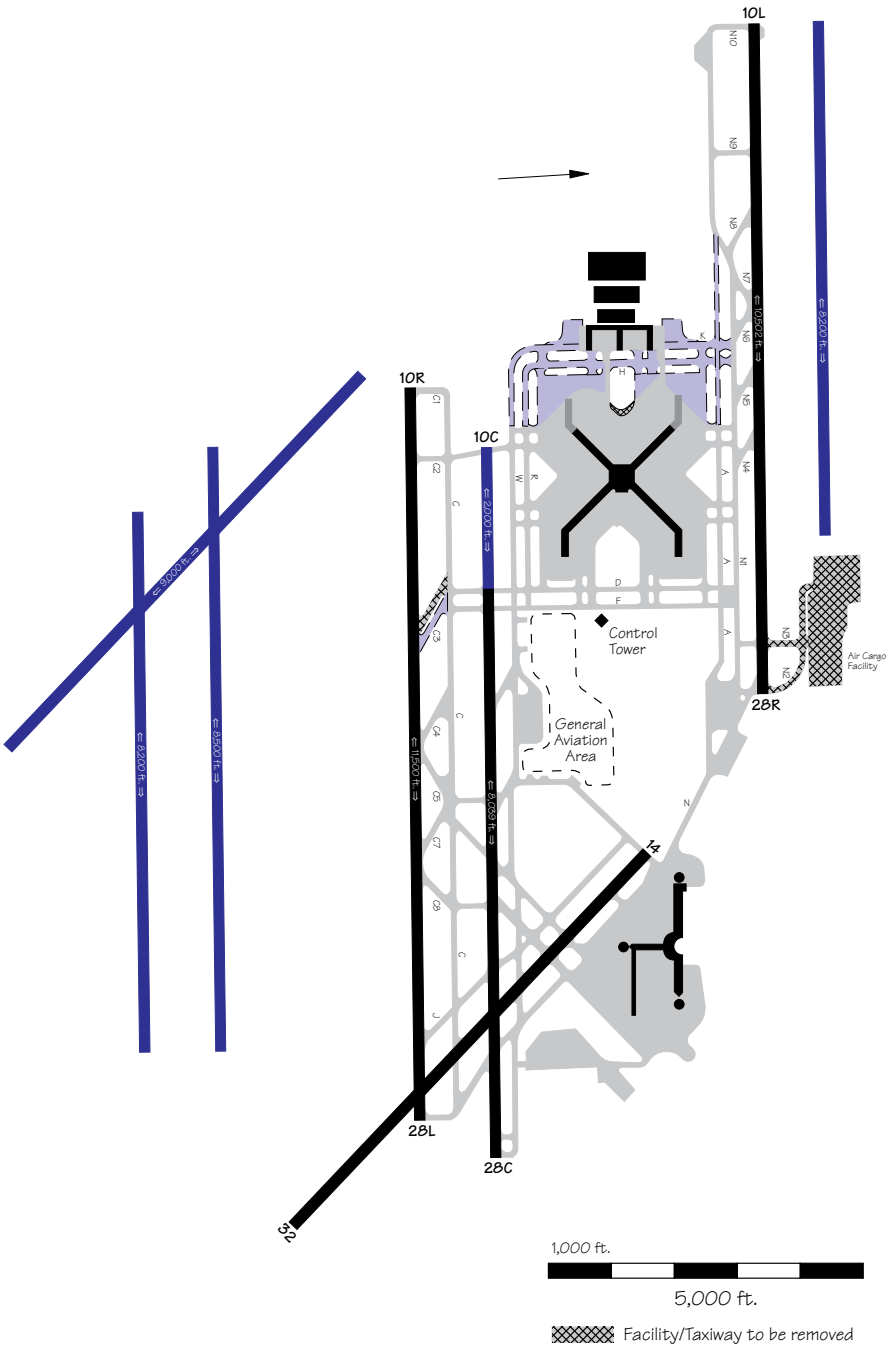


Phoenix (PHX)

A 9,500-foot third parallel runway, Runway 7/25, is proposed 800 feet south of Runway 8R/26L. The estimated cost of construction is $88 million. A final Environmental Impact Statement is scheduled for completion in FY93. The estimated operational date for 7,800 feet of Runway 7/25 is 1997; the remaining 1,700 feet of the runway is not scheduled at this time.

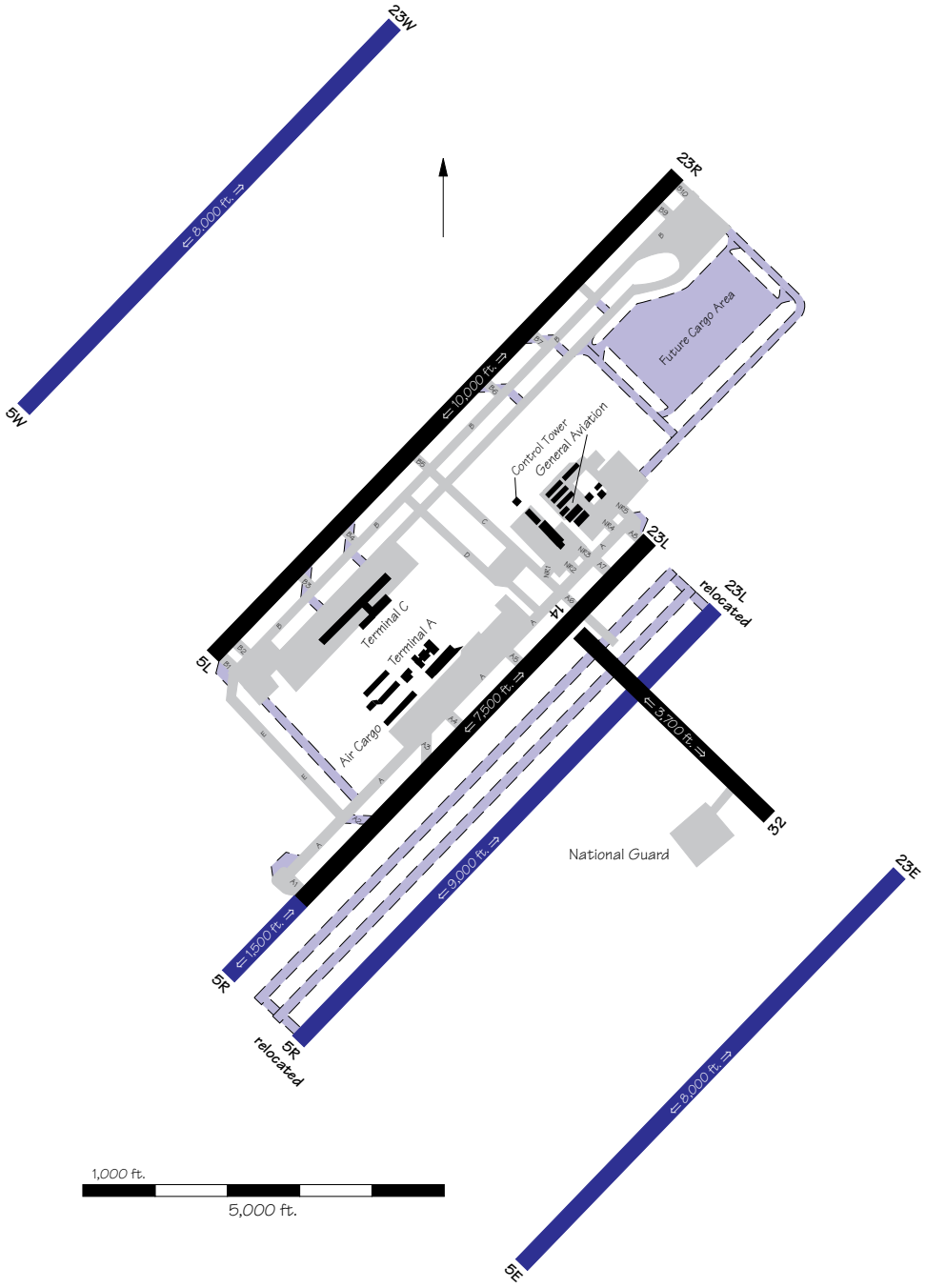
Pittsburgh (PIT)

A new Master Plan was started in 1990. It recommended a choice between a new parallel crosswind runway and a fourth Runway 10/28 parallel. Construction of Runway 14R/32L, parallel to existing crosswind Runway 14/32, is tentatively scheduled to begin in 1993 and be completed in 1995. It will be located 8,700 feet from the existing crosswind runway. Estimated cost is $100 million. The fourth Runway 10/28 parallel may take higher priority. It is also currently scheduled to begin in 1993, and be completed in 1996, also at an estimated cost of $100 million. Completion of the fourth parallel may permit triple independent IFR approaches.



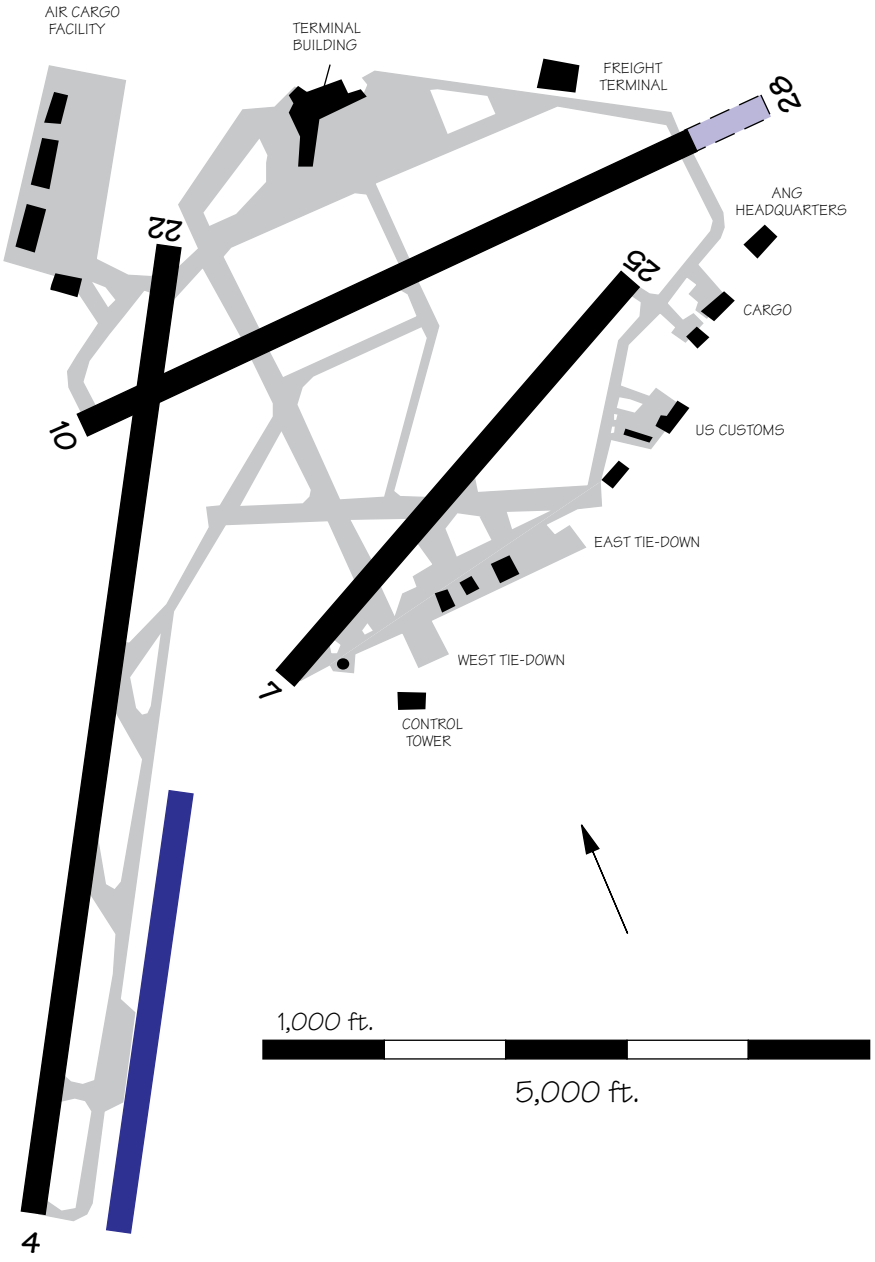
Raleigh-Durham (RDU)

The relocation of Runway 5R/23L and its associated taxiways is expected to begin in 1994. The new runway will be parallel to and approximately 1,200 feet southeast of existing Runway 5R/23L. It will be a 9,000-foot long air carrier runway and could permit independent IFR approaches. The estimated operational date is 1996, and the estimated cost of construction is $37 million. Two other runways are proposed for eventual construction. Runway 5W/23W would be located 1,000 to 4,300 feet to the northwest of Runway 5L/23R, and Runway 5E/23E would be located 1,000 to 4,300 feet to the southeast of the relocated Runway 5R/23L. The estimated cost for the construction of each of these runways is $75 million.



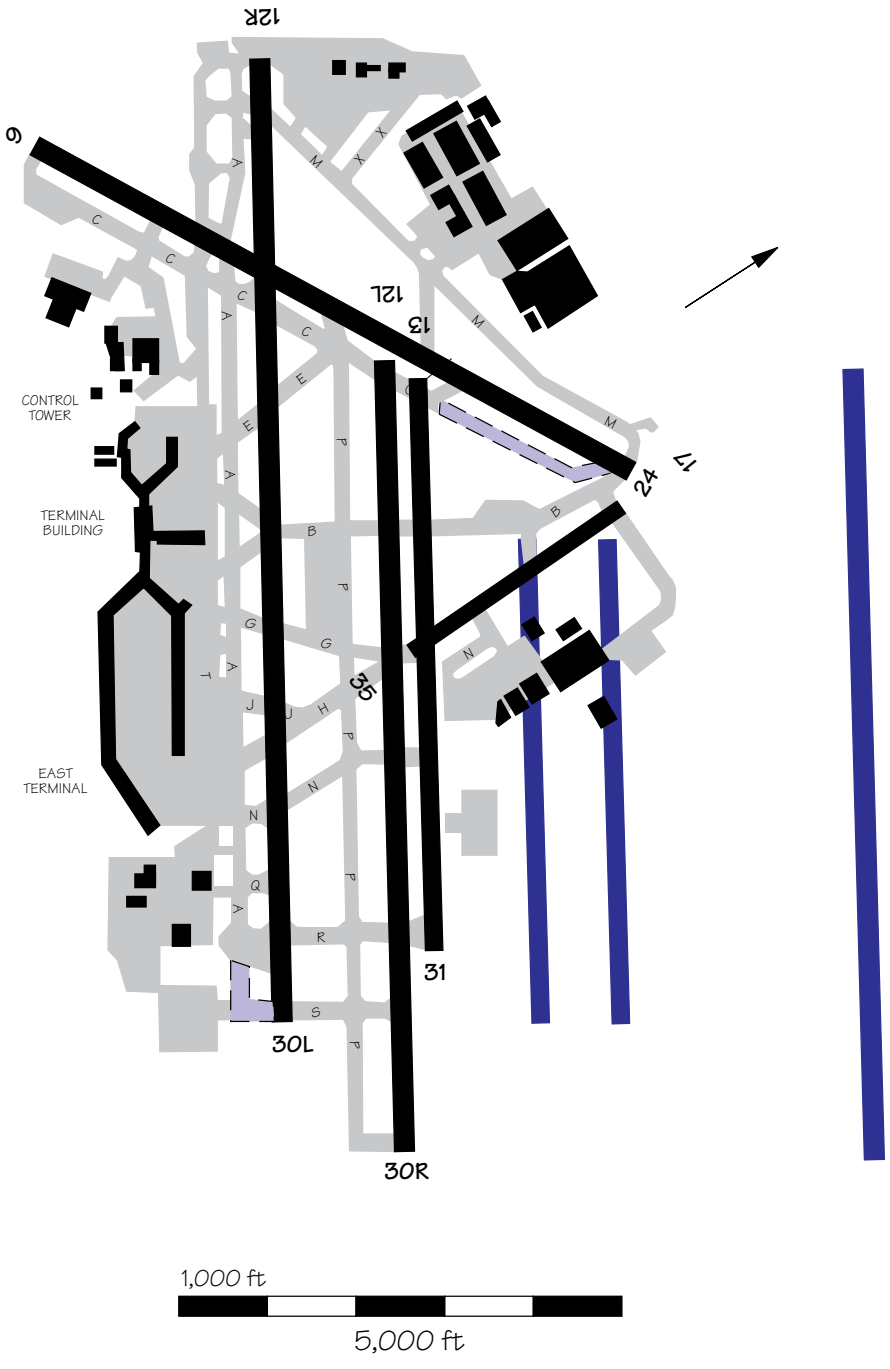
Rochester (ROC)

Construction of an extension to Runway 10/28 is expected to begin in 1995 and should be completed in 1996. The estimated cost of construction is $2.3 million. An extension to Runway 4/22 is expected to cost $0.5 million. Construction will begin in 1995, and the extension should be operational in 1996. Construction of a new parallel Runway 4R/22L is estimated to cost $4.7 million. The new runway should be operational in 2000. Environmental assessments have not yet been started for these projects.



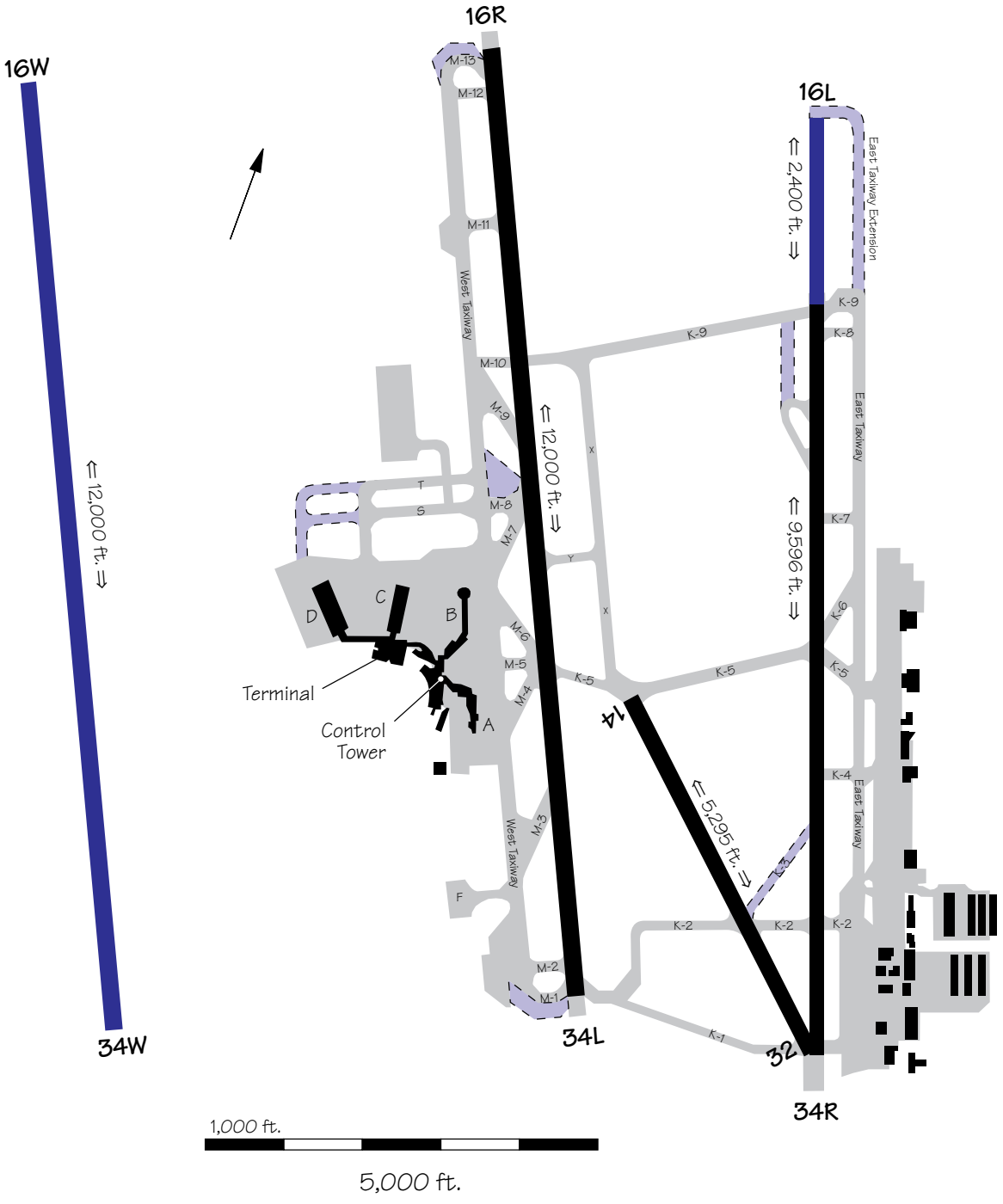
St. Louis (STL)

A new parallel Runway 12L/30R in several configurations has been recommended by the St. Louis Airport Capacity Design Team. Taxiway F has been permanently converted into a new Runway 13/31 for commuter and general aviation aircraft. A Master Plan Update is underway, and the entire airport layout may change as a result. The new plan will probably call for four parallel runways, with at least two supporting independent IFR operations.



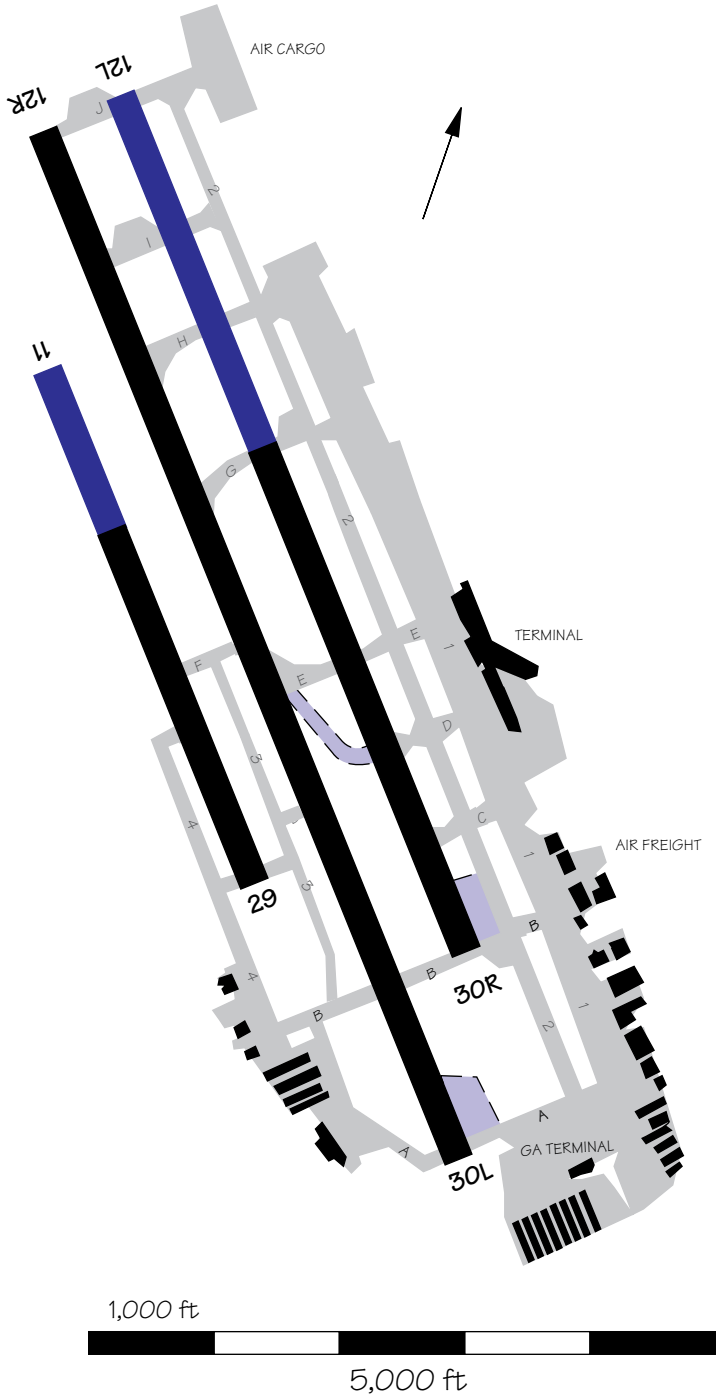
Salt Lake City (SLC)

A new 12,000 foot runway parallel to and 6,300 feet west of existing Runway 16R/34L is planned. Construction is scheduled to begin in 1993. The estimated cost of construction is $95 million. This may permit triple IFR approach operations, if they are approved.



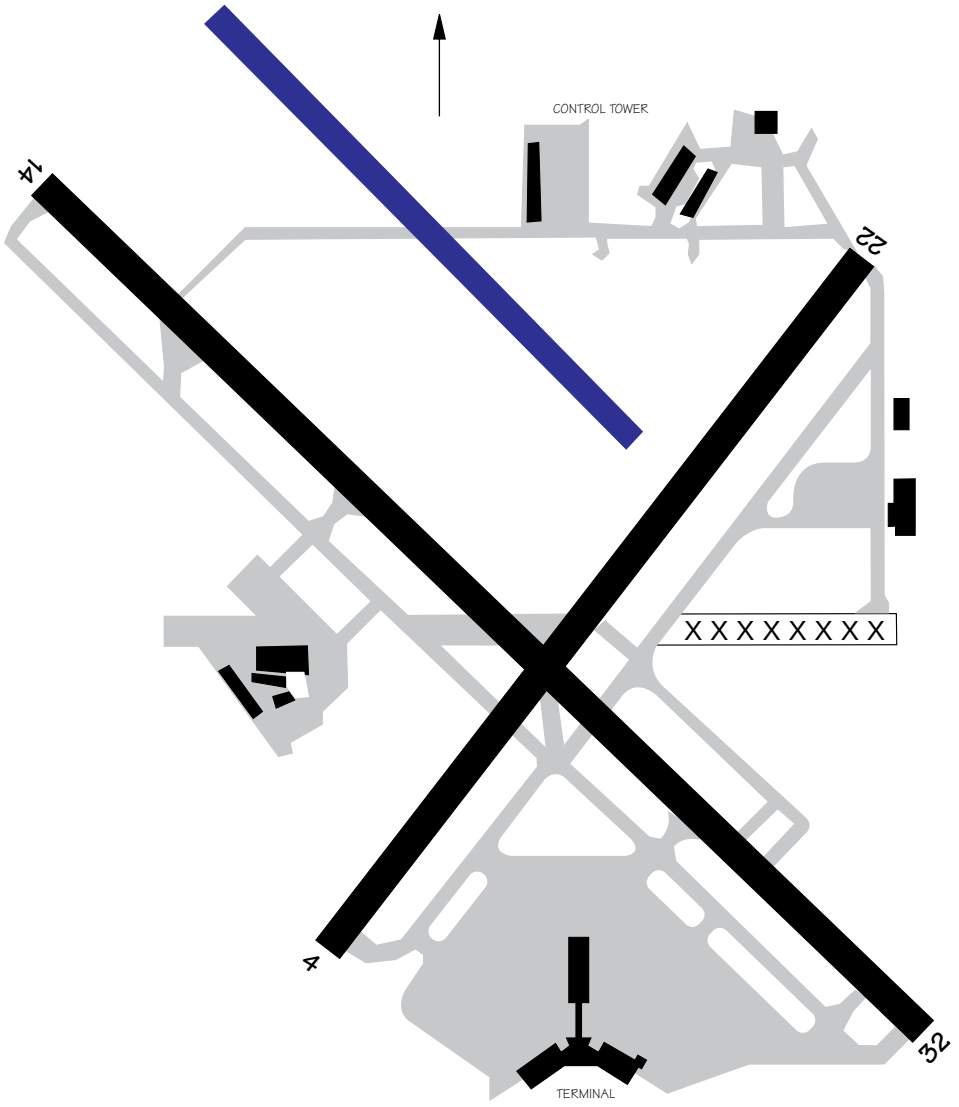
San Jose (SJC)

An extension of Runway 30R/12L is under construction at an estimated cost of $8 million and is scheduled for operation in 1993.



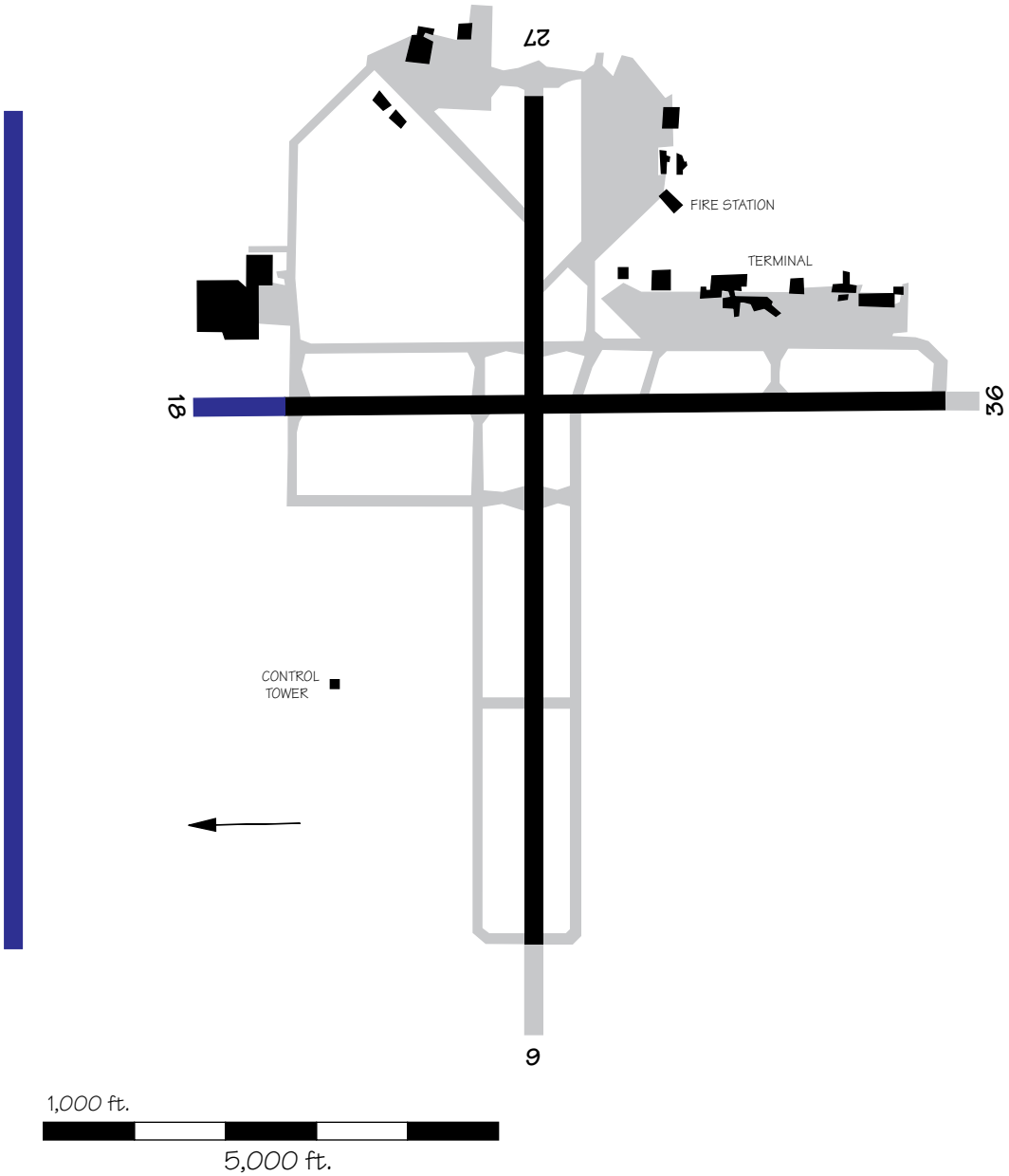
Sarasota (SRQ)

A new parallel Runway 14L/32R is being planned at an estimated cost of $10 million. It is expected to be operational by 1996. In addition, an extension of the existing Runway 14/32 is planned at a cost of $4.5 million. It is expected to be complete in 1995.



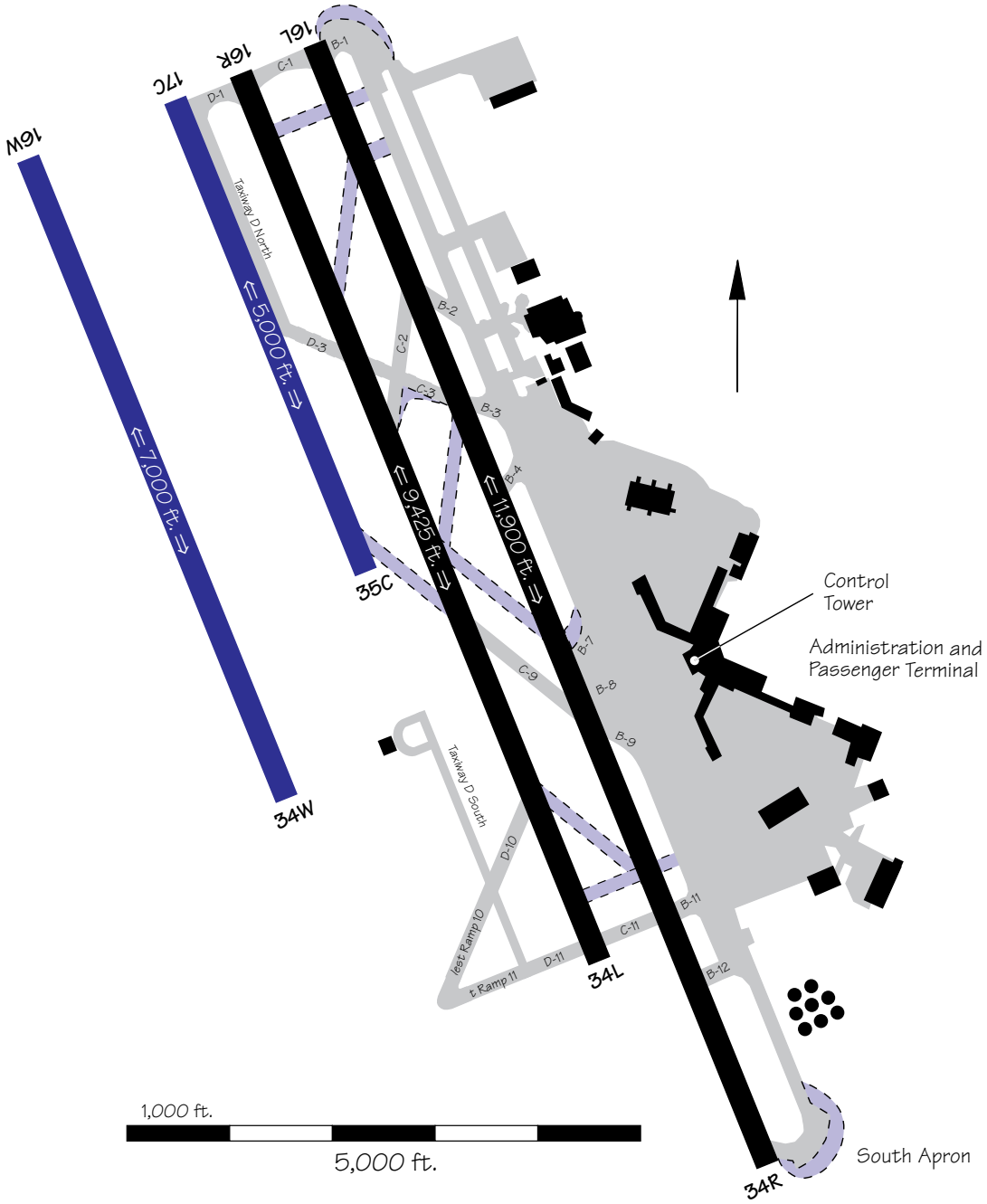
Savannah (SAV)

Three runway construction projects are being planned. A 1,000-foot extension to Runway 18/36 is expected to begin in 1994 and should be completed in 1995 at a cost of $3.9 million. A new 9,000-foot parallel runway, Runway 9L/27R, is shown on the airport layout. Construction is expected to begin in 2009 and should be completed in 2010 at a cost of $20 million. Also, an extension to the existing Runway 9R/27L is planned to begin in 1996, with construction expected to be completed in 1997 at a cost of $6.5 million.



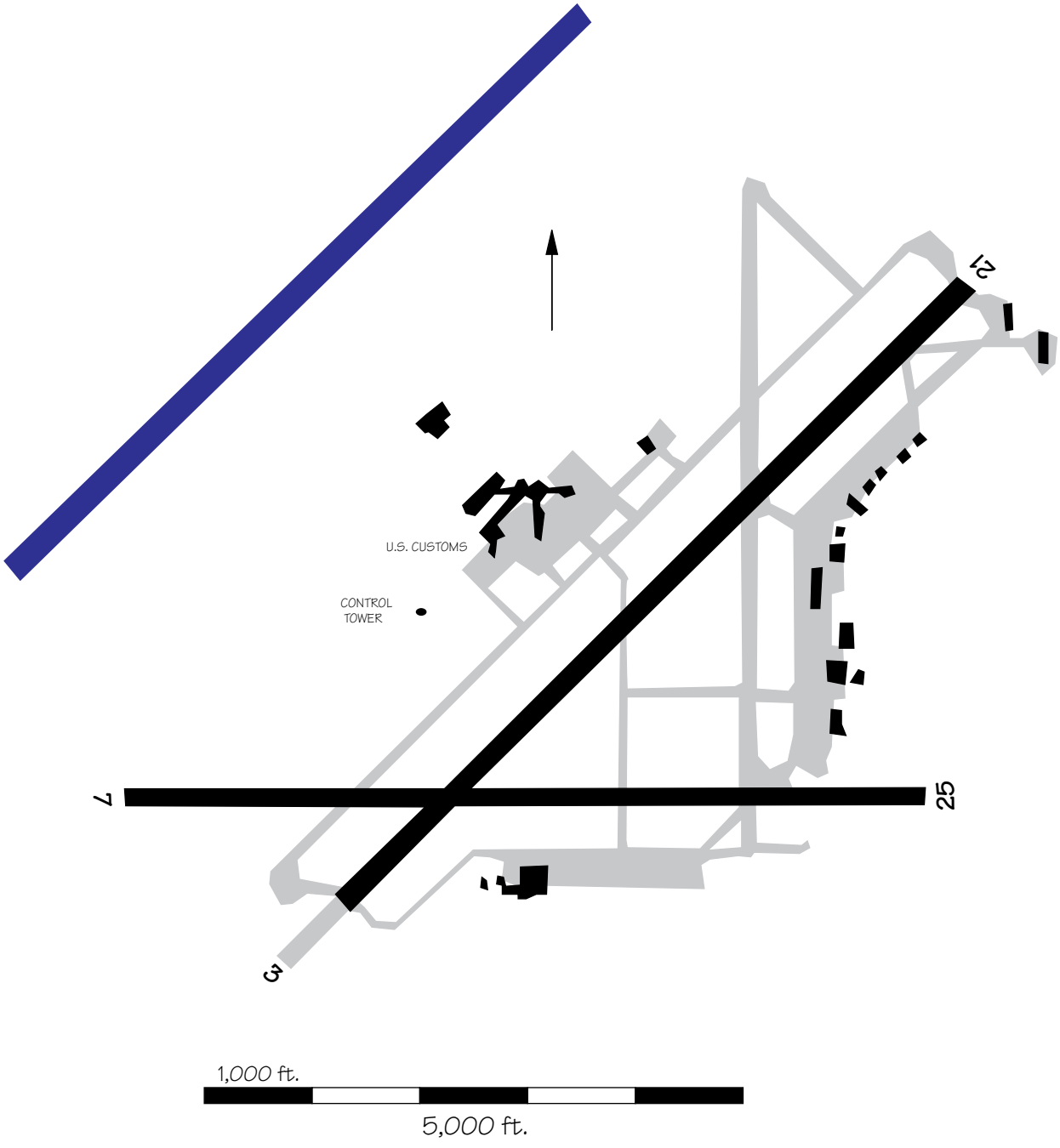
Seattle-Tacoma (SEA)

Potential airport improvements include a new 7,000-foot runway, Runway 16W/34W, to be located 2,500 feet from Runway 16L/34R, and conversion of an existing taxiway into a new parallel commuter runway for VFR use, Runway 17C/35C.



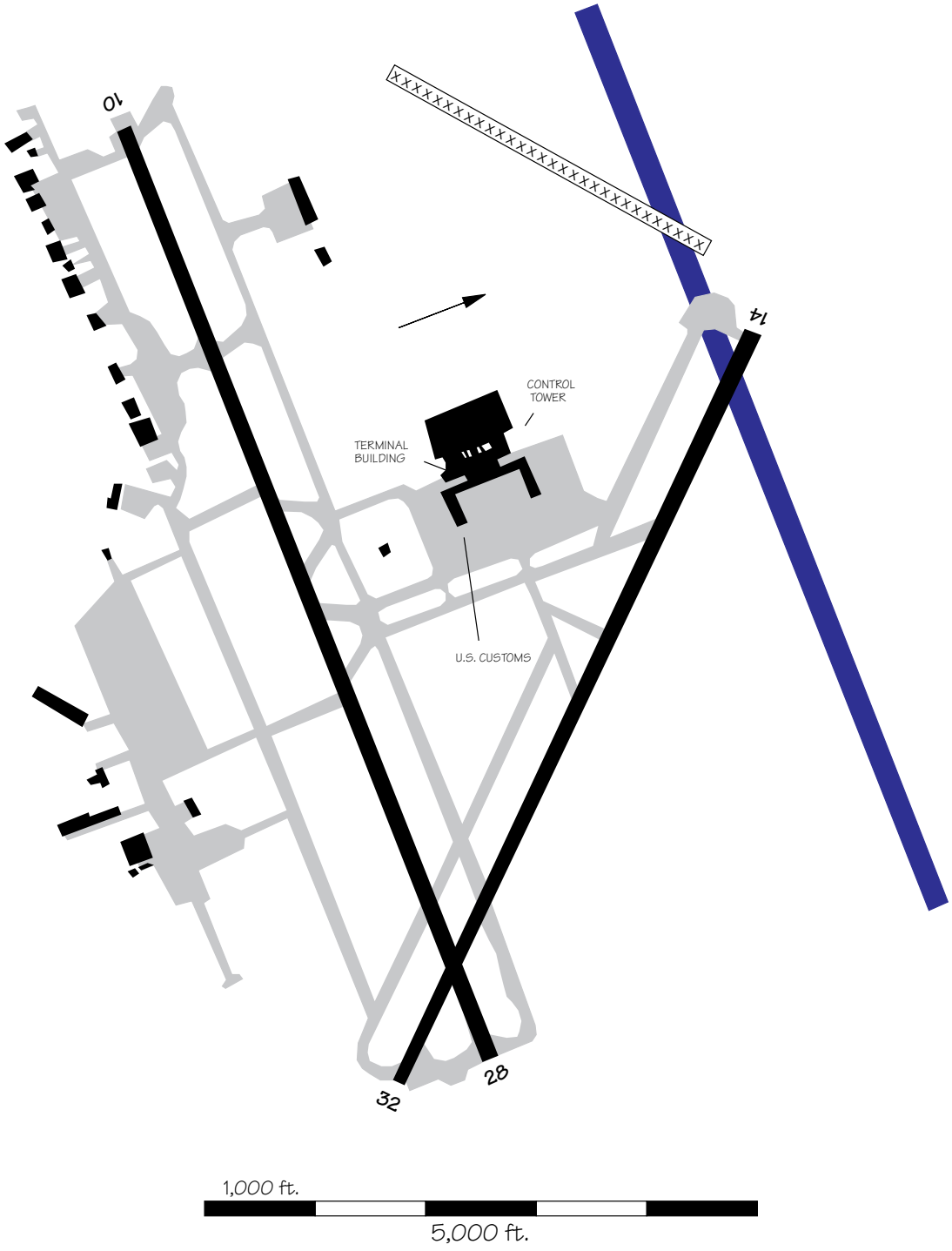
Spokane (GEG)

Future projects include the construction of a parallel runway, Runway 3L/21R. The new runway will be 8,800 feet by 150 feet and will be separated from Runway 3R/21L by 4,300 feet. This would enable independent parallel operations, doubling hourly IFR arrival capacity. The estimated cost of construction of the new runway is approximately $50-$75 million. Construction is expected to start in 1997 and should be completed in 2000.



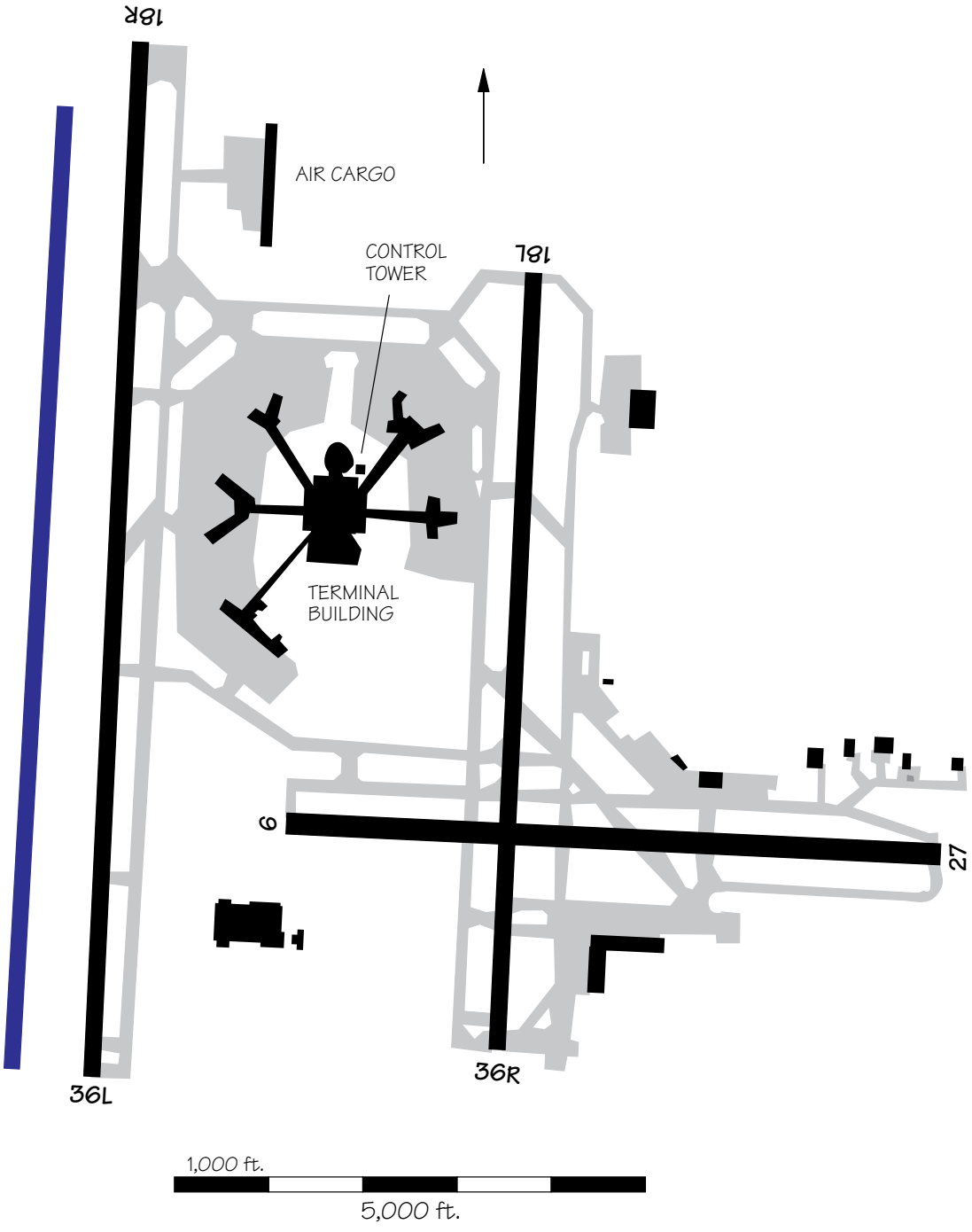
Syracuse (SYR)

There is potential for a parallel Runway 10L/28R, 9,000 feet long and separated from the existing Runway 10/28 by 3,600 feet. This would provide independent parallel IFR operations, doubling hourly IFR arrival capacity. The expected operational date is sometime in 1997 if construction starts in 1996 as anticipated. The cost of construction is estimated to be $55 million for the first phase of the new runway, which would be 7,500 feet long, including a parallel taxiway and connections to the ramp. The final length of the runway will be 9,000 feet.



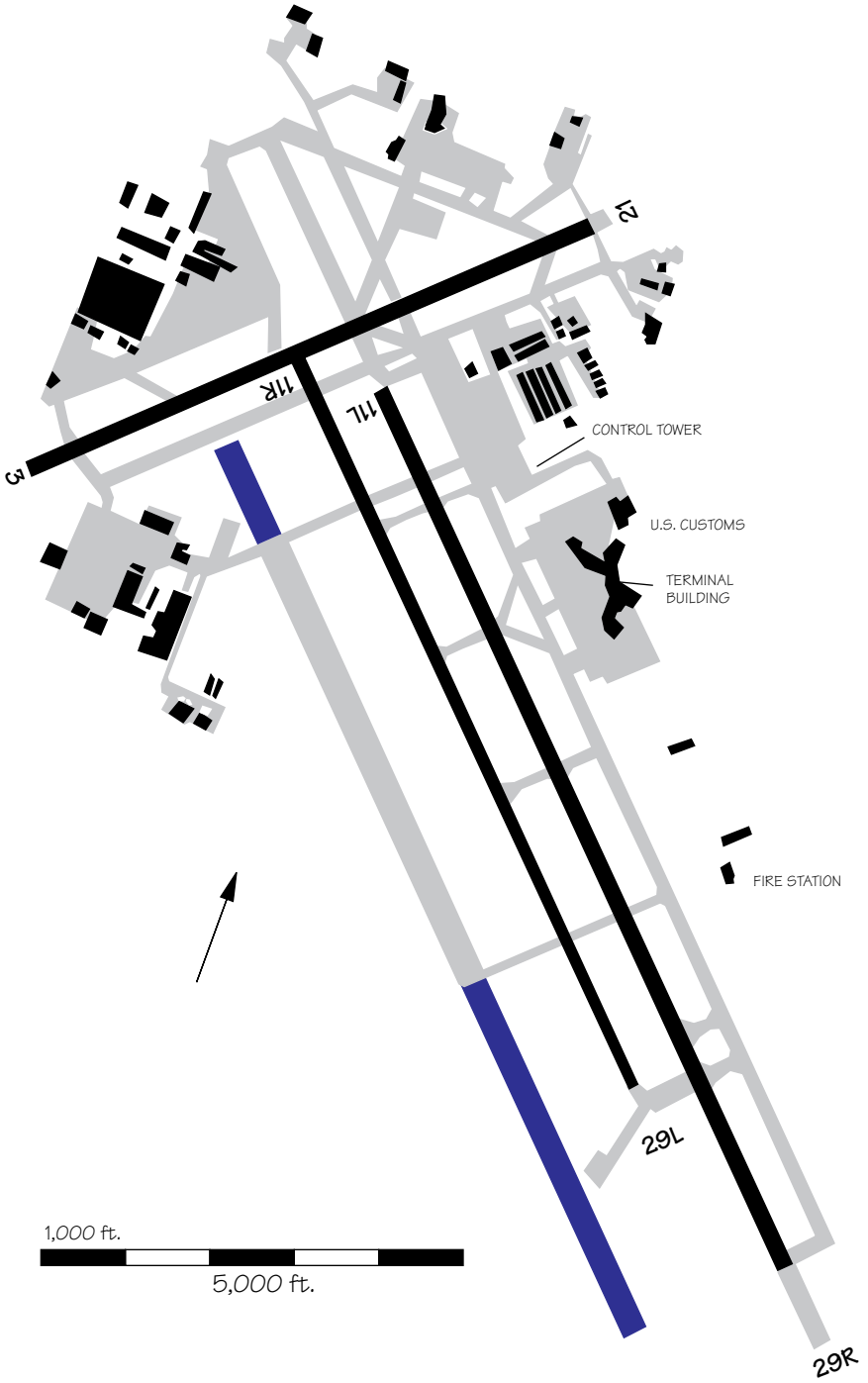
Tampa (TPA)

Plans have begun for a third parallel runway, Runway 18R/36L. The new runway will be 700 feet west of Runway 18R/36L and 9,650 feet long. Construction is scheduled to start in 1995. The estimated operational date for the runway is 1997, and the estimated cost of construction is $53 million. No increase in hourly IFR arrival capacity will be provided, but VFR capacity will increase as well as IFR departure capacity.



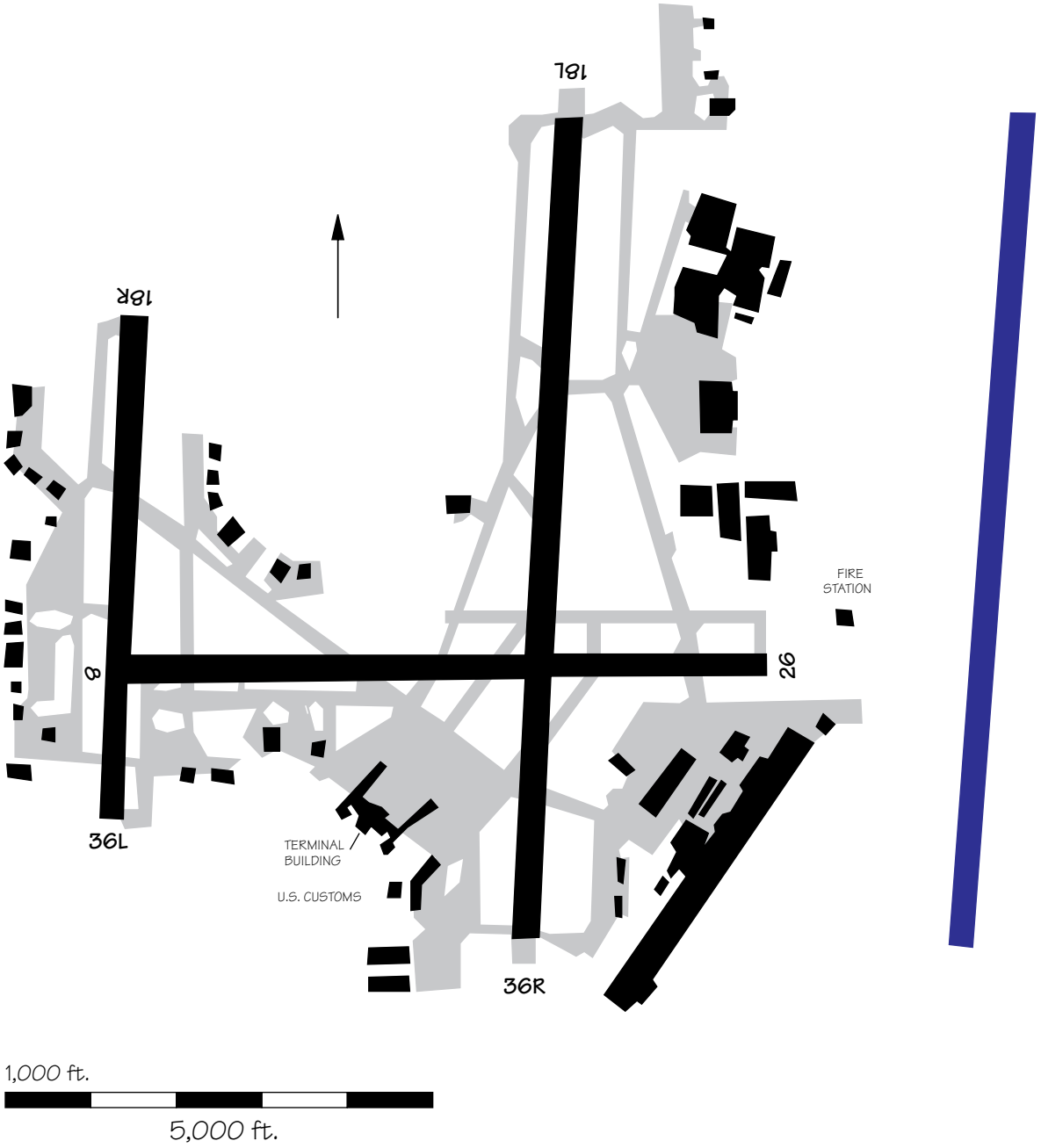
Tucson (TUS)

An additional parallel air carrier runway, Runway 11R/29L, has been proposed. Upon completion of the new runway, the current Runway 11R/29L, a general aviation runway, will revert to its original taxiway status. It is not anticipated that the sponsor will proceed before 1997-1999. The cost of construction is estimated to be $143 million.



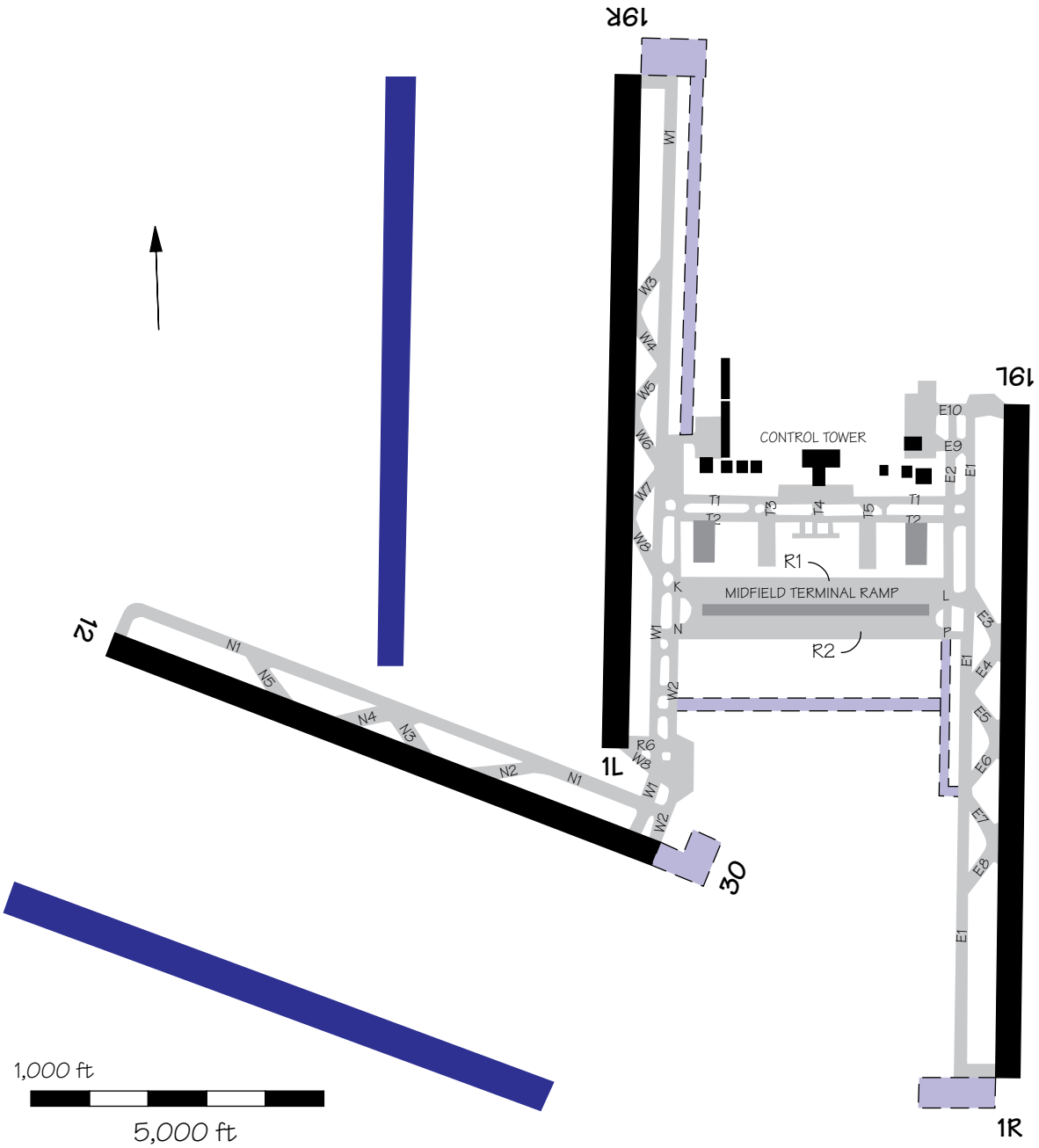
Tulsa (TUL)

A new parallel runway, Runway 17L/35R, is planned to be located 5,200 feet east of the present 17L/35R and will be 9,600 feet long. Construction is projected to start in January 1994, with an estimated operational date of July 1998. The cost of the new runway is estimated to be $100 million. The new runway could permit IFR triple independent approaches, if approved, to Runways 17L, 17C, and 17R.



Washington (IAD)

Construction of an extension to Runway 12/30 was completed in 1992. The estimated cost of construction was $12 million. Two new parallel runways are under consideration. A north-south parallel, Runway 1W/19W, would be located 3,500 feet west of the existing parallels and north of Runway 12/30. This could provide triple independent parallel approaches, if they are approved. Construction is expected to begin in 1999 with estimated completion in 2000 at a cost of $60 million. A second parallel is proposed for location 3,000 to 4,300 feet south of Runway 12/30.



West Palm Beach (PBI)

Runway 9L/27R will be extended 1,200 feet to the west and 811 feet to the east, for a total length of 10,000 feet. Construction is estimated to be completed in 1998. The total estimated project cost is $5 million. In addition, an extension of Runway 13/31 is planned to be complete in 1995 at a cost of $5 million.